



This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 25, 2018

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Jacksonville District,SAJ-2017-03020-RGH (THE VILLAGES OF LAKE SUMTER, INC. / NORTH TRACT PROPERTY / SUMTER)

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:FL County/parish/borough: Sumter City: Wildwood
Center coordinates of site (lat/long in degree decimal format): Lat. 28.825808° N, Long. 82.01811° W
Universal Transverse Mercator:

Name of nearest waterbody: Lake Okahumpka
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows:
Name of watershed or Hydrologic Unit Code (HUC): Lake Okahumpka - 031002080703; Little Jones Creek - 031002080705
[X] Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
[] Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

[] Office (Desk) Determination. Date:
[X] Field Determination. Date(s): March 29, 2018

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

[] Waters subject to the ebb and flow of the tide.
[X] Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: a portion of Lake Okahumpka occurs on the Site and would be considered a traditionally navigable water since it may be used, or was used in the past, or may be susceptible to use in interstate or foreign commerce. Jacksonville District Section 10 List.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are and are not "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply): 1

- [X] TNWs, including territorial seas
[X] Wetlands adjacent to TNWs
[X] Relatively permanent waters2 (RPWs) that flow directly or indirectly into TNWs
[X] Non-RPWs that flow directly or indirectly into TNWs
[X] Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
[X] Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
[] Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
[] Impoundments of jurisdictional waters
[] Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 1.37 acres.
Wetlands: 59.08 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):3

[X] Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: SW4, W3, W8, W9, WA, WC, WD are isolated waters under Solid Waste Agency of Northern Cook County(SWANCC) with no substantial nexus to interstate (or foreign) commerce. And were also determined to not

1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.

2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

3 Supporting documentation is presented in Section III.F.

have a significant nexus to “waters of the United States” (WOUS) based on topography, distance, and soils that would not allow for chemical, physical and/or biological connections between these systems and WOUS..

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: **Lake Okahumpka**.

Summarize rationale supporting determination: The water body qualifies as a WOUS as defined in 33 CFR 328.3(a)(1): all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. Lake Okahumpka is also listed in the Jacksonville District Section 10 Waters list.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": The wetlands and surface waters within the review area are bordering and contiguous with Lake Okahumpka. Wetland W1, W7, and WB are bordering and contiguous with Lake Okahumpka.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 36468 acres
Drainage area: 38 square miles
Average annual rainfall: 51.84 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
 Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **1 (or less)** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **1 (or less)** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: RPWs SW2 and SW3 are channelized ditch features that flow directly to Lake Okahumpka, the TNW. SW1 is also a channelized ditch feature, but flows through W6 prior to connecting to SW2 and SW3.

Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain: The RPWs SW2 and SW3 have been in existence since before 1951; SW1 was dug sometime in the 1960's.

Tributary properties with respect to top of bank (estimate):

Average width: 25 feet
Average depth: 15 feet
Average side slopes: **3:1**.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, with spoils forming berms on both sides of channelized portion.

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 2 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: Flow driven by rain events.

Other information on duration and volume:

Surface flow is: **Confined**. Characteristics: Ditch has groundwater.

Subsurface flow: **Unknown**. Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Clear and Tanic.

Identify specific pollutants, if known: Possibly impaired for Bacteria and Other Microbes, however significant agricultural fields are adjacent to this waterbody so it is highly likely that, nutrients, herbicides, and pesticides are also within this waterbody.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: Observed wildlife utilizing waterbodies.

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 59.93 acres

Wetland type. Explain: Palustrine Emergent/ Palustrine Forested.

Wetland quality. Explain: Good.

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain:

Surface flow is: **Confined**

Characteristics: Rain event controlled.

Subsurface flow: **Unknown**. Explain findings:

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: W2 abutting SW1, W6 abutting SW2/SW3, W10 connected by SW6 (non-RPW) to W1.

Ecological connection. Explain:

Separated by berm/barrier. Explain: Wetland W7, WA and WB.

(d) Proximity (Relationship) to TNW

Project wetlands are **1 (or less)** river miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **2-year or less** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Clear and Tanic.

Identify specific pollutants, if known: Possibly impaired for Bacteria and Other Microbes, however significant agricultural fields are adjacent to this waterbody so it is highly likely that, nutrients, herbicides, and pesticides are also within this waterbody.

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: Trees/Herbs 60%.
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: Observed wildlife.

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: 7

Approximately (300.00) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
W1 Y	23.9	WA N	0.07
W2 Y	5.58	WB N	0.07
W6 Y	25.55	Adjacent Upstream Wetlands Y	243.07
W7 N	0.32		
W10 Y	1.44		

Summarize overall biological, chemical and physical functions being performed: Storage of flood waters; reduction of downstream peak discharges and volumes; recharge of aquifers; maintenance of seasonal/baseflows; maintenance of groundwater supplies; removal of sediments and nutrients; provision of breeding grounds and wildlife habitat (e.g. feeding/foraging, nesting, spawning, rearing of young); supports diverse community of benthic invertebrates, a major food source for vertebrates.

Physical: The wetlands perform important flow maintenance functions including storage of flood waters and a release of these waters into the tributary in a more even and consistent manner. Therefore, the wetlands directly affect the duration, frequency, and volume of flow in the tributary and the downstream navigable water. The wetlands reduce local flooding. Storage of surface waters provides groundwater recharge that contributes to baseflow in the tributary that is vital to sustain aquatic life in downstream waters.

Chemical: The wetlands improve water quality by removing sediment and nutrients that would otherwise reach downstream waters and have a negative effect on aquatic resources.

Biological: The wetlands are of utmost importance biologically since the majority of other non-wetland areas in the watershed have been altered for agriculture, residential, or other purposes. These wetlands have a high abundance and diversity of species due to their transitional location between terrestrial and aquatic systems. Productivity in downstream waters can depend on the exchange of nutrients within the floodplains. Watersheds dominated by riparian wetlands export a large amount of carbon that is essential to downstream ecosystems. Particulate carbon is important for shredders and filter-feeders while dissolved carbon is important for microorganisms within these systems..

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: 24.29 acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: See Exhibit 1.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 3,000 linear feet 25 width (ft).
 Other non-wetland waters: acres.

Identify type(s) of waters:

3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: 6,000 linear feet 25 width (ft).
 Other non-wetland waters: acres.

Identify type(s) of waters:

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: See Exhibit 1.

Provide acreage estimates for jurisdictional wetlands in the review area: 300 acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: 1.44 acres.

⁸See Footnote # 3.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: Wetlands SW4, W3, W8, W9, WA, WC, WD are isolated. See Exhibit 1.
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “*SWANCC*,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 2.15 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 2.22 acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- Office concurs with data sheets/delineation report.
- Office does not concur with data sheets/delineation report.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following *Rapanos*.

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

1. Jurisdictional Wetlands and Waters: The Corps utilized the guidance provided in the *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States* (Guidance) and 33 CFR 328.3(a) to identify which waters in the review area are properly subject to Corps jurisdiction. The Corps found that there are and are not jurisdictional waters within the review area.

A. SW2 and SW3: RPW that flows directly to a TNW

The Corps determined that SW2 and SW3 are a relatively permanent water that flows directly to a TNW. The Guidance states that the Corps should exert jurisdiction over non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally. The Corps determined that SW2 and SW3 satisfies this standard, and is a jurisdictional RPW.

The Corps confirmed via current and historical aerial imagery and by personal observation that SW2 and SW3 convey water from Wetland 6 (W6) to Wetland 1 (W1) Lake Okahumpka, which is a TNW. SW2 and SW3 are connected via culvert at the point of the access road crossing.



Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

B. SW1: RPW that flows indirectly to a TNW

The Corps determined that SW1 is a relatively permanent water that flows indirectly to a TNW. The Guidance states that the Corps should exert jurisdiction over non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally. The Corps determined that SW1 satisfies this standard, and is a jurisdictional RPW.

The Corps confirmed via current and historical aerial imagery and by personal observation that SW1 conveys water from Wetland 2 (W2) to Wetland 6 (W6) and then to Wetland 1 (W1) Lake Okahumpka via SW2 and SW3.



C. SW6: Non-RPW that flows directly to a TNW

The Corps determined that SW6 is a non-relatively permanent water that flows directly to a TNW. The Guidance states that the Corps should exert jurisdiction over non-

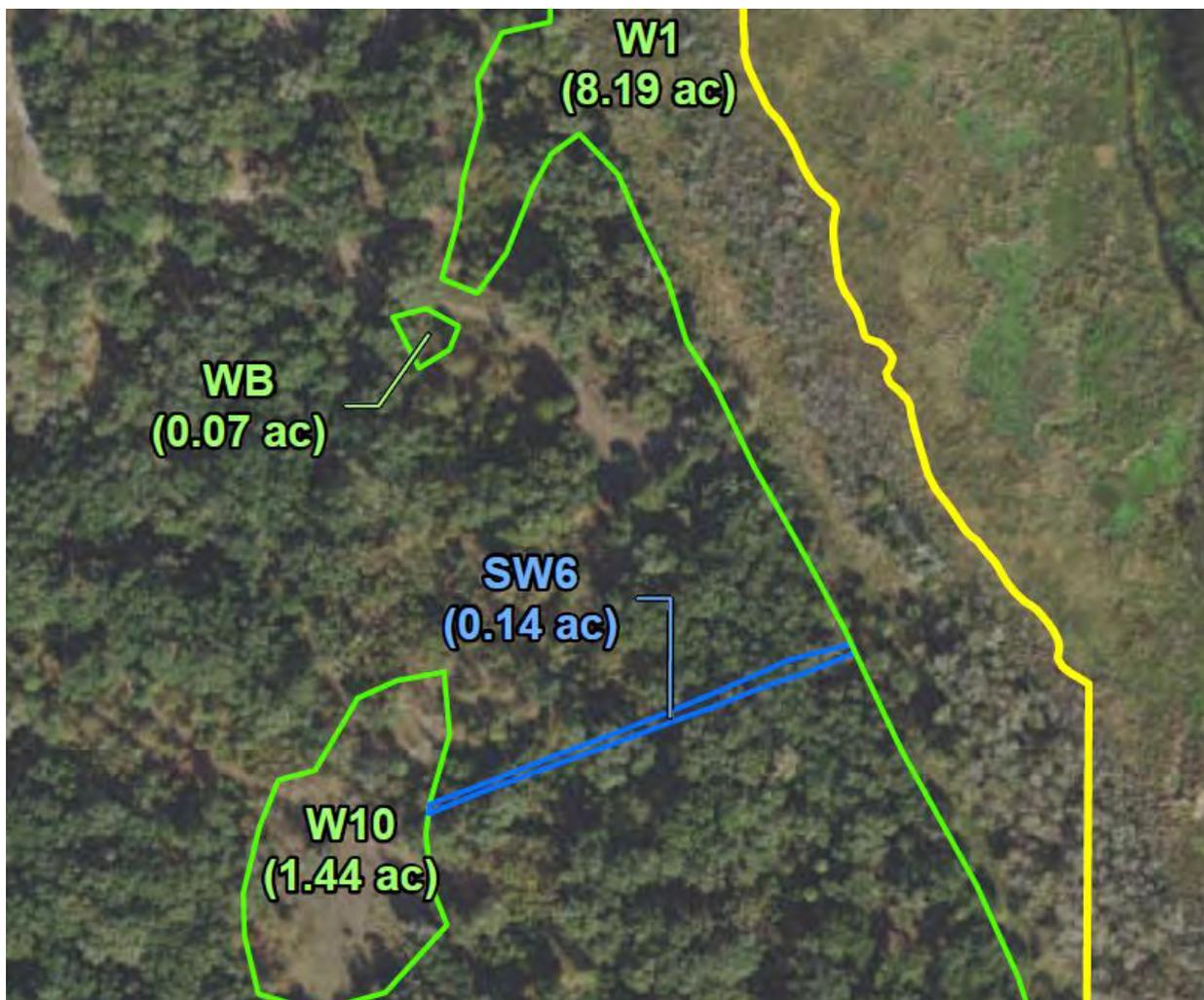
Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

navigable tributaries of traditional navigable waters that are not relatively permanent. The Corps is required to perform a significant nexus analysis to assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters. Florida is in the Eleventh Circuit and the Eleventh Circuit has concluded that the Kennedy standard is the sole method of determining CWA jurisdiction in that Circuit. Therefore, unless the aquatic resources are traditional navigable waters or wetlands adjacent to traditional navigable waters, the Corps needs to conduct a significant nexus determination on all other waters in order to determine jurisdiction under the CWA. *United States v. McWane, Inc., et al.*, 505 F.3d 1208 (11th Cir. 2007). The Corps has determined that for this review, SW6 has more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNWs, as described in Section III(C) of the Rapanos form. The Corps determined that SW6 satisfies this standard, and is a jurisdictional Non-RPW.

First, the Corps confirmed via current and historical aerial imagery and by personal observation that SW6 conveys water from Wetland 10 (W10) to Wetland 1 (W1) Lake Okahumpka, which is a TNW.

Second, SW6 conveys water, sediment, nutrients, pollutants, and carbon, providing a path for excess flood water from W10. The adjacent wetlands perform important flow maintenance functions including storage of flood waters and a release of these waters into the tributary in a more even and consistent manner. Therefore, the wetlands directly affect the duration, frequency, and volume of flow in the tributary and the downstream navigable water. Thus, SW6 has more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNWs.

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters



SW6 provides a direct connection from W10 to W1.

D. SW7: Non-RPW that flows indirectly to a TNW

The Corps determined that SW7 is non-relatively permanent waters that flows indirectly to a TNW. The Guidance states that the Corps should exert jurisdiction over non-navigable tributaries of traditional navigable waters that are not relatively permanent. The Corps is required to perform a significant nexus analysis to assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters. Florida is in the Eleventh Circuit and the Eleventh Circuit has concluded that the Kennedy standard is the sole method of determining CWA jurisdiction in that Circuit. Therefore, unless the aquatic resources are traditional navigable waters or wetlands adjacent to traditional navigable waters, the Corps needs to conduct a significant nexus determination on all other waters in order to determine jurisdiction under the CWA. *United States v. McWane, Inc., et al.*, 505 F.3d 1208 (11th Cir. 2007). The Corps has determined that for

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

this review, SW7 has more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNWs, as described in Section III(C) of the Rapanos form. The Corps determined that SW7 satisfies this standard, and are a jurisdictional Non-RPW.

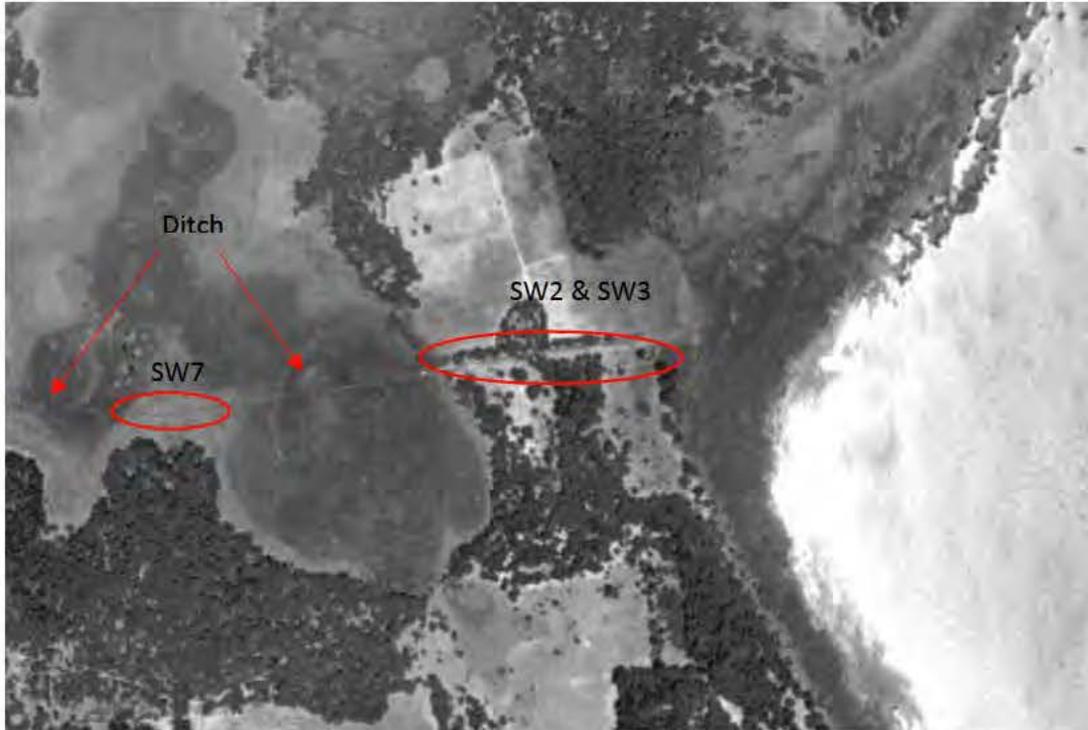
First, the Corps confirmed via current and historical aerial imagery and by personal observation that SW7 conveys water from the deeper western lobe of Wetland 6 (W6) (offsite) to the eastern lobe of W6 (onsite). Wetland 6 (W6) flows to Wetland 1 (W1) Lake Okahumpka via SW2 and SW3.

Second, SW7 conveys water, sediment, nutrients, pollutants, and carbon, providing a path for excess flood water from wetland systems to the west of W6 to W1. Thus, SW7 has more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNWs.



Current aerial shows the delineated boundaries of SW7 and adjacent wetlands. Note that SW7 is part of a larger ditch system that drains a series of wetland systems to the west.

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters



SW7 was part of a larger ditch system to the west of the property that includes SW2 and SW3 that was present in this 1951 aerial.

E. W1, W7, WB: Wetlands adjacent to a TNW

According to the Guidance alone, the Corps should exert jurisdiction over wetlands adjacent to TNWs, including over adjacent wetlands that do not have a continuous surface connection to TNWs. The term adjacent means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are adjacent wetlands.

First, W1 is contiguous with Lake Okhumpka a TNW, and is therefore considered adjacent.

Second, W7 and WB are both separated from W1 by a man-made road created by fill dirt (a man-made barrier), and therefore considered adjacent.

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters



W1 and W7 are directly adjacent to Lake Okhumpka (shown to the right of both wetlands).



W1 and WB is directly adjacent to Lake Okhumpka (shown to the right of both wetlands).

F. W2 and W6: Wetlands abutting or adjacent to a RPW

According to the Guidance alone, the Corps should exert jurisdiction over those adjacent wetlands that have a continuous surface connection to RPWs (e.g., they are not separated by uplands, a berm, dike, or similar feature). W2 and W6 are directly connected to RPWs. W6 is a larger wetland that extends off the project property and is connected via SW2/SW3 to W1. W2 is a medium sized wetland that extends off the project property. This wetland has been modified via excavation of a ditch that facilitates stormwater outfall into this system. W2 is connected via SW1 to W6 which flows to W1 via SW2/SW3.

In addition, pursuant to specific requirements of case law which apply to the 11th Circuit Court of Appeals jurisdiction, the Corps determined that W2 and W6 would satisfy the significant nexus standard. W6 could transport nutrients, organic carbon to the

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

downstream TNW via SW2/SW3 which exhibits consistent seasonal flow based on historical aeriels and personal observation of existing conditions. Aquatic species could easily forage in both W6 and SW2/SW3 due to the direct surface connection between the two waters. Also, W6 could entrain pollutants that would otherwise flow directly to the TNW via SW2/SW3. Thus, W6 has a biological, chemical, and physical effect on the TNW that is not speculative or insubstantial.

Additionally, W2 could transport nutrients, organic carbon to the downstream TNW via SW1 to W6 which flows to W1 via SW2/SW3 which exhibits consistent seasonal flow based on historical aeriels and personal observation of existing conditions. Aquatic species could easily forage in W2, SW1 and SW2/SW3 due to the direct surface connection between the waters. Also, W2 could entrain pollutants that would otherwise flow directly to the TNW via SW1 and SW2/SW3. Thus, W2 has a biological, chemical, and physical effect on the TNW that is not speculative or insubstantial.



Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

Connection between W2 and the TNW, via SW1, W6, and SW2/SW3.



Connection between W6 and the TNW, via SW2/SW3.

G. W10: Wetlands abutting or adjacent to a Non-RPW

According to the Guidance alone, the Corps should exert jurisdiction non-navigable, not relatively permanent tributaries and their adjacent wetlands where such tributaries and wetlands have a significant nexus to a TNW. W10 is directly connected to adjacent to Lake Okhumpka via a non-RPW SW6 (see Item C above).

The Corps determined that SW6 is a non-relatively permanent water that flows directly to a TNW. The Corps is required to perform a significant nexus analysis to assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters. Florida is in the Eleventh Circuit and the Eleventh Circuit has concluded that the Kennedy standard is the sole method of determining CWA jurisdiction in that Circuit. Therefore, unless the aquatic resources are traditional navigable waters or wetlands

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

adjacent to traditional navigable waters, the Corps needs to conduct a significant nexus determination on all other waters in order to determine jurisdiction under the CWA. *United States v. McWane, Inc., et al.*, 505 F.3d 1208 (11th Cir. 2007). The Corps has determined that for this review, SW6 has more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNWs, as described in Section III(C) of the Rapanos form. The Corps determined that SW6 satisfies this standard, and is a jurisdictional Non-RPW.

First, the Corps confirmed via current and historical aerial imagery and by personal observation that SW6 conveys water from Wetland 10 (W10) to Wetland 1 (W1) Lake Okahumpka, which is a TNW.

Second, SW6 conveys water, sediment, nutrients, pollutants, and carbon, providing a path for excess flood water from W10. The adjacent wetlands perform important flow maintenance functions including storage of flood waters and a release of these waters into the tributary in a more even and consistent manner. Therefore, the wetlands directly affect the duration, frequency, and volume of flow in the tributary and the downstream navigable water. Thus, SW6 has more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNWs.

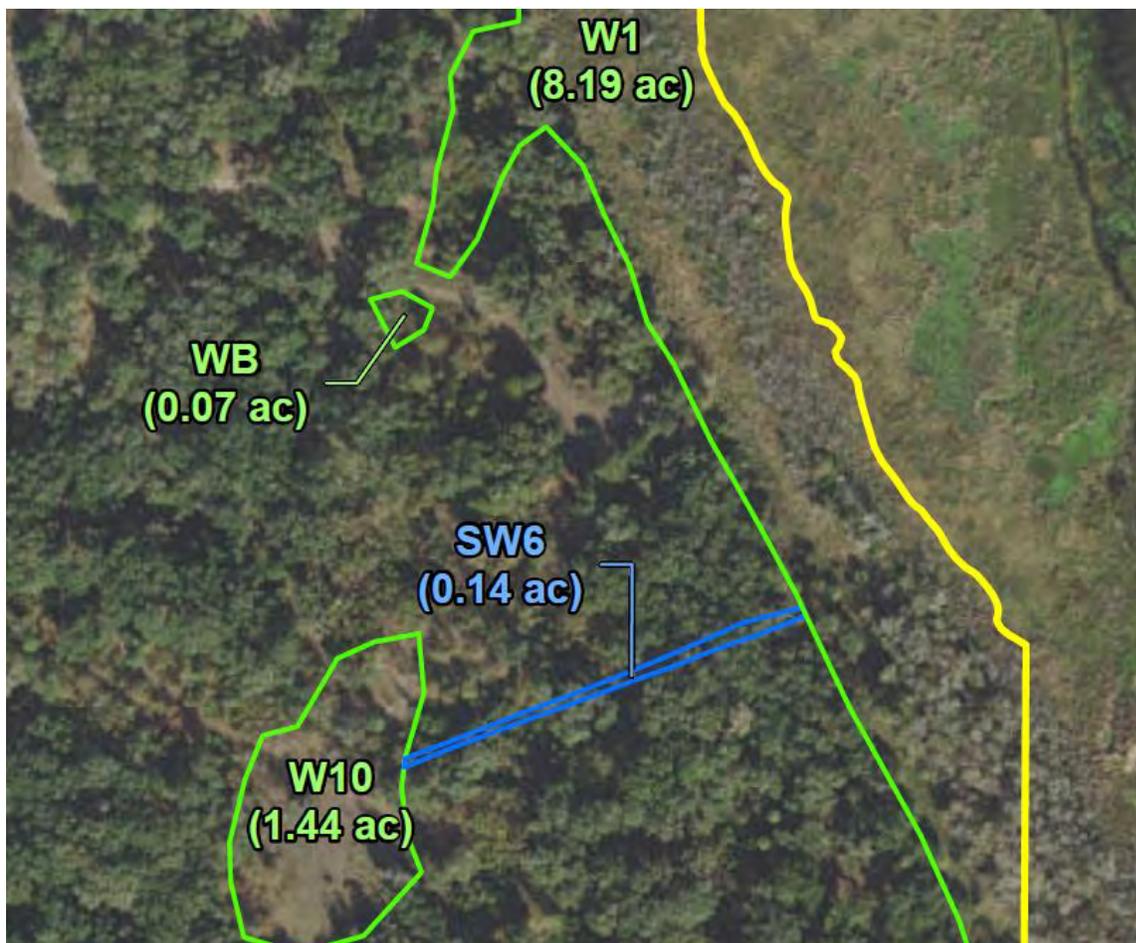


Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

W10 is directly connected to W1/TNW via SW6.

2. Non-Jurisdictional Waters and Wetlands

The Corps determined that there are several waters and wetlands within the review area that are non-jurisdictional for the reasons discussed below.

A. Wetlands SW4, W3, W8, W9, WA, WC, WD: SWANCC

The review area contains 7 depressional wetlands that the Corps determined are non-jurisdictional isolated wetlands. The wetlands listed below are non-navigable, intrastate waters for which the only potential basis for the exercise of Corps jurisdiction would be migratory bird use. Migratory bird use by itself is not a sufficient basis for the exercise of CWA regulatory jurisdiction (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001)).

Wetland	Size (acres)
SW4	0.32
W3	0.24
W8	0.46
W9	0.15
WA	0.07
WC	0.86
WD	0.12
Total:	2.22

The Corps determined that none of these waters are navigable-in-fact. Also, none of these waters are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, and are not subject to the ebb and flow of the tide (33CFR328.3(a)(1)).

The Corps determined that none of these wetlands are interstate waters or wetlands. None of these wetlands straddle an interstate boundary. Therefore, none of these wetlands satisfy the criteria provided in 33 CFR 328.3(a)(2).

These wetlands are located entirely within private property and could not be used by foreign or interstate travelers for recreational or other purposes, these wetlands do not support fisheries that could be taken and sold in interstate or foreign commerce, and there is no industrial use for these wetlands in interstate commerce. Thus, no use or degradation of these waters could directly affect interstate commerce. Therefore, none of these wetlands satisfy the criteria provided in 33 CFR 328.3(a)(3).

The Corps determined that none of these wetlands are impoundments of waters otherwise defined as waters of the U.S. Therefore, none of these wetlands satisfy the criteria provided in 33 CFR 328.3(a)(4).

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

The Corps determined that none of the waters listed above are tributaries of waters defined in 33 CFR 328.3(a)(1-4). No of these waters convey water outside of the review area. Thus, none of these wetlands satisfy 33 CFR 328.3(a)(5).

The Corps determined that none of these inland wetlands are subject to the ebb and flow of the tide. Therefore, none of these waters could be defined as the territorial seas, and thus satisfy 33 CFR 328.3(a)6.

The Corps determined that none of these wetlands are adjacent to any water of the United States as defined by 33 CFR 328.3(a) (1-6).

None of these wetlands could be categorized as adjacent to the nearest traditional navigable water. The nearest TNW is Lake Okhumpka. These wetlands do not possess any of the three criteria provided in the current guidance. First, these wetlands do not possess an unbroken surface or subsurface connection to the TNW. Second, these wetlands are separated from the TNW primarily by uplands that have been subjected to multi-use urban development. Thus, the separation exceeds that of a manmade dike or barrier, a natural river berm, beach dune, or similar obstruction. Last, the aerial distance of these wetlands from the nearest TNW is not reasonably close.

The proximity of these wetlands to the nearest TNW would not allow the Corps to support a science-based inference that the wetlands have an ecological interconnection with the nearest TNW.

The table below provides the aerial distance of each of these wetlands to TNW.

Wetland	Distance to Lake Okhumpka (miles)
SW4	0.45
W3	0.45
W8	0.45
W9	0.30
WA	0.45
WC	0.45
WD	0.46

None of these wetlands exhibit a continuous surface connection with any RPW. These wetlands do not directly abut any RPW. Given the aerial distance of each of these wetlands from any RPW, the Corps determined that none of these wetlands touch or share a common border with any RPW. Thus, the standard for adjacency to an RPW provided in the Guidance is not satisfied in these wetlands. In light of these facts, the Corps determined that these wetlands are so distinct from the RPWs in aerial distance and boundary that they should not be considered adjacent to any RPWs onsite.

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters

Therefore, the Corps determined that these wetlands do not satisfy the criteria provided in 33 CFR 328.3(a)(7).

The wetlands listed above are non-navigable, intrastate waters for which the only potential basis for the exercise of Corps jurisdiction would be migratory bird use. Migratory bird use by itself is not a sufficient basis for the exercise of CWA regulatory jurisdiction (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001)). Thus, the Corps determined that these wetlands are not waters of the United States, and are not jurisdictional.

WOUS OSW IMPACTS

Impact Activity Area (AA) #	Wetland Acres (AC)	Impact Acres (AC)	Impact Area (SF)	Cut Volume (CYD)	Fill Volume (CYD)	Status	Mitigation	Credits
SW-1	0.61					RPW		
SW-2	0.24					RPW		
SW-3	0.25					RPW		
SW-6	0.14					Non-RPW		
SW-7	0.13					Non-RPW		
TOTAL	1.37	0	0	0	0			

WOUS WETLAND IMPACTS

Impact Activity Area (AA) #	Wetland Acres (AC)	Impact Acres (AC)	Impact Area (SF)	Cut Volume (CYD)	Fill Volume (CYD)	Status	Mitigation	Credits
W1	23.9					Wetland adjacent to TNW		
W2	5.58					Wetland abutting RPW		
W3	0.24					Isolated		
W6	25.55					Wetland abutting RPW		
W7	0.32					Wetland adjacent to TNW		
W8	0.46					Isolated		
W9	0.15					Isolated		
W10	1.44					Wetland abutting Non-RPW		
WA	0.07					Isolated		
WB	0.07					Wetland adjacent to TNW		
WC	0.86					Isolated		
WD	0.12					Isolated		
SW-4	0.32					Isolated		
Total	59.08	0	0	0	0			0

WOTUS

Isolated

2.22

Non-WOTUS

Abut/Adjacent

56.86

Isolated

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 3/1/10
 Applicant/Owner: The Villages State: FL Sampling Point: W1-wet
 Investigator(s): CJH/JMW Section, Township, Range: S 21, 17, 16 T19S R23E
 Landform (hillslope, terrace, etc.): Depressions, flats, drainage ways - marine terraces Local relief (concave, convex, none): Concave, linear Slope (%): 0-1%
 Subregion (LRR or MLRA): 4 Lat: 28°49'52.09" N Long: 82°1'3.91" W Datum: -
 Soil Map Unit Name: 36-Floridan mucky fine sand, depressionat NWI classification: Freshwater forested / Shrub wetland
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required, check all that apply)</u></p> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<p><u>Secondary Indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input checked="" type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<p>Field Observations:</p> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> </u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> </u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> </u> (includes capillary fringe)	<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><i>border - 30' radius assessment area</i></p>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: w1-net

Tree Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Taposia distichum</u>	<u>65</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2. <u>L. straciflua</u>	<u>15</u>		<u>FAC</u>
3. <u>Q. laurifolia</u>	<u>10</u>		<u>FACW</u>
4.			
5.			
6.			
7.			
8.			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85 (A/B)

50% of total cover: 45 20% of total cover: 18

Sapling/Shrub Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>L. straciflua</u>	<u>3</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>Sabal palmetto</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
3. <u>Casipia scolymosa</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
4.			
5.			
6.			
7.			
8.			

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals:	(A) (B)

Prevalence Index = B/A =

50% of total cover: 6.5 20% of total cover: 2.6

Herb Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Polygonum sp.</u>	<u>3</u>		<u>-</u>
2. <u>H. umbellata</u>	<u>2</u>		<u>OBL</u>
3. <u>L. straciflua</u>	<u>4</u>		<u>FAC</u>
4. <u>Thalysium</u>	<u>2</u>		<u>-</u>
5. <u>Sidaea bipinnata</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
6. <u>Sambucus racemosa</u>	<u>2</u>		<u>FACW</u>
7. <u>Wood's genus Q. salicina</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
8. <u>Quercus virginiana</u>	<u>1</u>		<u>FACU</u>
9.			
10.			
11.			
12.			

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0¹
- Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

50% of total cover: 17 20% of total cover: 6.5

Woody Vine Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Smilax bona-nox</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2. <u>T. radicans</u>	<u>3</u>		<u>FAC</u>
3. <u>Asplenium arborescens</u>	<u>2</u>		<u>FAC</u>
4. <u>Vitis vulpina</u>	<u>1</u>		<u>FAC</u>
5. <u>P. gungueneria</u>	<u>3</u>		<u>FACU</u>
50% of total cover: <u>19</u> 20% of total cover: <u>3.8</u>			

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below)

SOIL

Sampling Point: w1-net

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4"	10YR 2/1	M	—	—	—	M	Mucky Mineral	
4-11"	10YR 2/1	M	—	—	MS	M	NFS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|---|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) | <input type="checkbox"/> 1 cm Muck (A9) (LRR O) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) | <input type="checkbox"/> 2 cm Muck (A10) (LRR S) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input checked="" type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) | |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) | |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) | |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

F, C, M = ~~low~~ = Few, Common, Many on the % color

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North tract City/County: Sumter Sampling Date: 3/1/18
 Applicant/Owner: The Villages State: FL Sampling Point: W1-up
 Investigator(s): CJH / JMW Section, Township, Range: S 21, 16, 17 T 19S R 23E
 Landform (hillslope, terrace, etc.): Flatwoods on marine terraces Local relief (concave, convex, none): Convex, linear Slope (%): 0-2%
 Subregion (LRR or MLRA): U Lat: 28°49'52.16" N Long: 82°1'4.35" W Datum: —
 Soil Map Unit Name: 44-Oliver fine sand, bouldery subsurface NWI classification: —

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches) _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches) _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches) _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W1-49

Tree Stratum (Plot size: <u>30' radius</u>)				Dominance Test worksheet:	
1.	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
<u>Sabal palmetto</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<u>4</u>	
<u>O. taeniifolia</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACW</u>		
<u>O. virginiana</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>		
<u>Cestis laevigata</u>	<u>7</u>		<u>FACW</u>		
<u>Citrus sp.</u>	<u>5</u>		<u>—</u>		
6.					
7.					
8.					
50% of total cover: <u>31</u> <u>62</u> = Total Cover 20% of total cover: <u>12.4</u>				Total Number of Dominant Species Across All Strata: <u>9</u> (B)	
Percent of Dominant Species That Are OBL, FACW, or FAC: <u>44</u> (A/B)					
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				Prevalence Index worksheet:	
1.	Absolute % Cover	Dominant Species?	Indicator Status	Total % Cover of:	Multiply by:
<u>Callitropa americana</u>	<u>7</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	OBL species _____	x 1 = _____
<u>C. straciflua</u>	<u>2</u>		<u>FAC</u>	FACW species _____	x 2 = _____
<u>Ulmus americana</u>	<u>2</u>		<u>FAC</u>	FAC species _____	x 3 = _____
<u>C. laevigata</u>	<u>2</u>		<u>FACW</u>	FACU species _____	x 4 = _____
<u>S. palmetto</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	UPL species _____	x 5 = _____
<u>Carya sp.</u>	<u>5</u>		<u>—</u>	Column Totals: _____ (A)	_____ (B)
6.				Prevalence Index = B/A = _____	
7.					
8.					
50% of total cover: <u>11.5</u> <u>23</u> = Total Cover 20% of total cover: <u>4.6</u>				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
Herb Stratum (Plot size: <u>30' radius</u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
1.	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Four Vegetation Strata:	
<u>B. bizinetta</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	Tree – Woody plants, excluding vines, 3 in (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
<u>Thelypteris sp.</u>	<u>3</u>		<u>—</u>	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
<u>Woodsgrass O. sp. 3</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>UPL</u>	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
<u>Urena lobata</u>	<u>3</u>		<u>FAC</u>	Woody vine – All woody vines greater than 3.28 ft in height.	
<u>C. straciflua</u>	<u>4</u>		<u>FAC</u>		
<u>Mecran cheekwood O. coriata</u>	<u>6</u>		<u>FAC</u>		
<u>C. laevigata</u>	<u>3</u>		<u>FACW</u>		
<u>D. communis</u>	<u>2</u>		<u>FAC</u>		
<u>Citrus sp.</u>	<u>1</u>		<u>—</u>		
10.					
11.					
12.					
50% of total cover: <u>28.5</u> <u>57</u> = Total Cover 20% of total cover: <u>11.4</u>				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	
Woody Vine Stratum (Plot size: <u>30' radius</u>)					
1.	Absolute % Cover	Dominant Species?	Indicator Status		
<u>Smilax bona-nox</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FAC</u>		
<u>T. radicans</u>	<u>5</u>		<u>FAC</u>		
<u>Gelsemium segegens</u>	<u>5</u>		<u>FAC</u>		
<u>Passiflora foetida</u>	<u>3</u>		<u>FACU</u>		
<u>Vitis vulpina</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FAC</u>		
<u>A. arborea</u>	<u>5</u>		<u>FAC</u>		
<u>P. guineensis</u>	<u>5</u>		<u>FACU</u>		
50% of total cover: <u>35.5</u> <u>71</u> = Total Cover 20% of total cover: <u>14.2</u>					

Remarks: (If observed, list morphological adaptations below).

No hydric soil or hydrology at this sample point, therefore no segment to run prevalence Index test.

SOIL

Sampling Point W1-4p

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12"	10YR 6/1	M	10YR 2/1	C			FS	< 70% coated patches

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) | <input type="checkbox"/> 1 cm Muck (A9) (LRR O) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) | <input type="checkbox"/> 2 cm Muck (A10) (LRR S) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) | |
| <input type="checkbox"/> Coast Prairie Redox (A18) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) | |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) | |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

M = may
C = common

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 3/1/18
 Applicant/Owner: The Villages State: FL Sampling Point: W2-Wet
 Investigator(s): CJH/JMW Section, Township, Range: S 21, T 16, R 17 - T 19 S R 23 E
 Landform (hillslope, terrace, etc.): Depressions, Drainage basins, flatlands + minor terraces Local relief (concave, convex, none): Concave, linear Slope (%): 0-1%
 Subregion (LRR or MLRA): 4 Lat: 28° 50' 8.2" N Long: 82° 1' 11.69" W Datum:
 Soil Map Unit Name: 30-Placid Fine Sand, freq. ponded, 0-1% slopes NWI classification: Freshwater Emergent wetland
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<p><u>Secondary Indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<p>Field Observations:</p> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W2 - wet

Tree Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2. <u>Q. virginiana</u>	<u>5</u>		<u>FACU</u>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	<u>5</u>	(A)
Total Number of Dominant Species Across All Strata:	<u>6</u>	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>83</u>	(A/B)

50% of total cover: 10 20% of total cover: 4

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____
Prevalence Index = B/A = _____	

Sapling/Shrub Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>A. rubrum</u>	<u>5</u>		<u>FAC</u>
2. <u>Sambucus canadensis</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
3. <u>Sabal palmetto</u>	<u>8</u>		<u>FAC</u>
4. <u>Juniperus virginiana</u>	<u>3</u>		<u>FACU</u>
5. _____			
6. _____			
7. _____			
8. _____			

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0¹
- Problematic Hydrophytic Vegetation¹ (Explain)

50% of total cover: 25.5 20% of total cover: 10.2

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Herb Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Thelypteris sp.</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW-OBL</u>
2. <u>Paspalum floridanum</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
3. <u>A. rubrum</u>	<u>2</u>		<u>FAC</u>
4. <u>S. canadensis</u>	<u>5</u>		<u>FACW</u>
5. <u>B. cylindrica</u>	<u>1</u>		<u>FACW</u>
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

50% of total cover: 34 20% of total cover: 13.6

Woody Vine Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>T. radicans</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2. <u>P. guineensis</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
3. <u>Vitis mansoniana</u>	<u>5</u>		<u>FAC</u>
4. <u>Ampelopsis arborea</u>	<u>5</u>		<u>FAC</u>
5. _____			

Hydrophytic Vegetation Present? Yes No

50% of total cover: 20 20% of total cover: 8

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: W2-wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7"	10YR 2/1	M	—	—	—	—	VFS	
7-12"	10YR 6/1	M	10YR 2/1	C		M	VFS	
			10YR 7/1	C		M	VFS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

% → Few - F
Common - C
Many - M

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 3/1/18
 Applicant/Owner: The Villages State: FL Sampling Point: W2-UP
 Investigator(s): CJH/JMW Section, Township, Range: 5.21, 16, 17, 20 ; T19S R23E
 Landform (hillslope, terrace, etc.): Flatlands on marine terraces Local relief (concave, convex, none): Convex linear Slope (%): 0-2%
 Subregion (LRR or MLRA): L1 Lat: 28°50'5.94" N Long: 82°1'10.65" W Datum: -
 Soil Map Unit Name: 44-Oldsmar fine sand, bouldery subsurface NWI classification: -

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) </div> <div style="width: 48%;"> <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) </div> </div>	<p><u>Secondary Indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<p>Field Observations:</p> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: _____

Tree Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Q. laurifolia</u>	<u>60</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>Q. nigra</u>	<u>8</u>		<u>FAC</u>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			

50% of total cover: 34.0 68 = Total Cover
20% of total cover: 13.6

Sapling/Shrub Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Q. laurifolia</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>S. repens</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
3. <u>Q. nigra</u>	<u>7</u>		<u>FAC</u>
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			

50% of total cover: 16 32 = Total Cover
20% of total cover: 6.4

Herb Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Scleria trigloea</u>	<u>3</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>Quercus spp</u>	<u>6</u>		<u>-</u>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			

50% of total cover: 4.5 9 = Total Cover
20% of total cover: 1.8

Woody Vine Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celastrum Scand. vine</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2. <u>Smilax glauca</u>	<u>3</u>		<u>FAC</u>
3. <u>Vitis murrayana</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
4. _____			
5. _____			

50% of total cover: 21.0 43 = Total Cover
20% of total cover: 8.6

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
 - 2 - Dominance Test is >50%
 - 3 - Prevalence Index is ≤3.0¹
 - Problematic Hydrophytic Vegetation¹ (Explain)
- ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below)

SOIL

Sampling Point: W2-4P

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8"	10YR 2/1	M	10YR 5/1	-	-	M	VFS	
8-11"	10YR 3/1	M	-	-	-	-	-	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) | <input type="checkbox"/> 1 cm Muck (A9) (LRR O) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) | <input type="checkbox"/> 2 cm Muck (A10) (LRR S) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) | ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) | |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) | |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | | |

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

% → F - few
C - common
M - many

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 3/1/18
 Applicant/Owner: The Villages State: FL Sampling Point: W3-wet
 Investigator(s): CJH/Tmw Section, Township, Range: S21, 16, 17; T19S R23E
 Landform (hillslope, terrace, etc.): Flatwoods or marine terraces Local relief (concave, convex, none): Convex, linear Slope (%): 0-2%
 Subregion (LRR or MLRA): U Lat: 28°50'0.75"N Long: 82°1'11.78"W Datum: -
 Soil Map Unit Name: 44-Oldsmar Fine Sand, bouldery subsurface NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (if needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply): <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

SOIL

Sampling Point: W3-wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4"	10 YR 2/1	M	—		MS	M	VFS	
4-11"	10 YR 2/1	M	10 YR 5/1	C		M	VFS	< 70% coated 10 YR 2/1
			10 YR 6/1	F		M	VFS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

4/ F - low
C - common
M - many

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 2/21/10
 Applicant/Owner: The Villages State: FL Sampling Point: W6-wet
 Investigator(s): CJH/JMW Section, Township, Range: S 21 17 8 T 19 S R 28 E
 Landform (hillslope, terrace, etc.): Depressions, Drainages or Flatlands Local relief (concave, convex, none): Concave, linear Slope (%): 0-1%
 Subregion (LRR or MLRA): U Lat: 28°49'45.2"N Long: 82°1'12.72"W Datum: _____
 Soil Map Unit Name: 30-Placid Fine Sand, frag. ponded, 0-1% slope NWI classification: Freshwater Forested/Shrub wetland
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____ Remarks: _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
--	--

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (minimum of one is required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<p>Secondary Indicators (minimum of two required)</p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<p>Field Observations:</p> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): <u>no standing water in 30' radius circle</u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): <u>not H₂O in pit</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>to surface</u> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____ (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____ Remarks: _____	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W6-wet

Tree Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Q. laurifolia</i>	30	✓	FACU
2. <i>Q. virginiana</i>	7		FACU
3.			
4.			
5.			
6.			
7.			
8.			

50% of total cover: 18.5 37 = Total Cover
20% of total cover: 7.4

Sapling/Shrub Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Ulmus</i> sp.	10	✓	FAC-UPL
2. <i>Sabal palmetto</i>	5		FAC
3. <i>Callitriche americana</i>	3		FACU
4. <i>Ranunc</i> sp.	15	✓	FACU-UPL
5.			
6.			
7.			
8.			

50% of total cover: 16.5 33 = Total Cover
20% of total cover: 6.6

Herb Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Oxalis stricta</i>	2	✓	UPL
2. <i>Solanum virginicum?</i>	5	✓	FAC-FACU
3. <i>Mexican chickweed</i>	2		
4. <i>Sabal palmetto</i>	10	✓	FAC
5. <i>Rubus argutus</i>	3		FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			

50% of total cover: 11.0 22 = Total Cover
20% of total cover: 4.4

Woody Vine Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Smilax beryllifera</i>	50	✓	FAC
2. <i>Smilax glauca</i>	5		FAC
3. <i>Toxicodendron radicans</i>	5		FAC
4. <i>Pentameris gangetica</i>	5		FACU
5. _____			

50% of total cover: 32.5 65 = Total Cover
20% of total cover: 13.0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>30</u>	x 2 = <u>60</u>
FAC species <u>60</u>	x 3 = <u>180</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>90</u> (A)	<u>240</u> (B)

Prevalence Index = B/A = $\frac{240}{90} = 2.67$

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
 - 2 - Dominance Test is >50%
 - 3 - Prevalence Index is $\leq 3.0^1$
- Problematic Hydrophytic Vegetation¹ (Explain)
- ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below).

Excluded dominant plants from prevalence index test that could not be identified to species and that had a range for the indicator status.

SOIL

Sampling Point: W6-wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-0.6'	10YR 2/1	M					VFS	
0.6-1.0'	10YR 3/1	M	10YR 3/4	C	C	M	VFS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 163C, 153D)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 2/21/12
 Applicant/Owner: The Villages State: FL Sampling Point: WB-wet
 Investigator(s): Jmw/CJH Section, Township, Range: S 21, 17, 16 T19S R35E
 Landform (hillslope, terrace, etc.): Knoles, Riser, Flats, ridges on MT Local relief (concave, convex, none): Convex, linear Slope (%): 0-5%
 Subregion (LRR or MLRA): U Lat: 28°49'20.14" N Long: 82°17'19.09" W Datum: —
 Soil Map Unit Name: 33-Sparr fine sand, bouldy subsurface, 0-5% slopes NWI classification: Freshwater Emergent wetland
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;"><u>MT = marine terraces</u></p>	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<p><u>Secondary Indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<p>Field Observations:</p> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1.0 + in center of wetland</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0.6' in pit</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>to wetland edge</u> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W8-wet

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Herb Stratum (Plot size: <u>30' radius</u>)				
1.	<u>Panicum repens</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2.	<u>Polygonum hydropiperoides</u>	<u>7</u>		<u>OBL</u>
3.	<u>Sagittaria filifolius</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
4.	<u>Luziola fluitans</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
5.	<u>Juncus effusus</u>	<u>2</u>		<u>OBL</u>
6.	<u>A. philoxeroides</u>	<u>5</u>		<u>OBL</u>
7.	<u>Cardamine pennsylvanica</u>	<u>3</u>		<u>FACW</u>
8.	<u>Oralis stricta</u>	<u>1</u>		<u>UPL</u>
9.				
10.				
11.				
12.				
_____ = Total Cover				
50% of total cover: <u>29.0</u> 20% of total cover: <u>11.6</u>				
Woody Vine Stratum (Plot size: <u>30' radius</u>)				
1.				
2.				
3.				
4.				
5.				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: W8-wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-0.2'	10YR 2/2	M	—				clay	
0.2'-0.9'	10YR 2/1	M	10YR 2/2	C		M	sd	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 2/21/12
 Applicant/Owner: The Villages State: FL Sampling Point: WB-UP
 Investigator(s): Jmw/CJH Section, Township, Range: S 21 17 16 T 19S R 23E
 Landform (hillslope, terrace, etc.): Knolls, rises, flats, ridges on mt Local relief (concave, convex, none): convex, linear Slope (%): 0-5%
 Subregion (LRR or MLRA): U Lat: 28° 49' 21.02" N Long: 82° 1' 18.36" W Datum: -
 Soil Map Unit Name: 38-Spurs fine sand, banded subsurface, 0-5% slopes NWI classification: -
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input checked="" type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<p><u>Secondary indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<p>Field Observations:</p> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>no H₂O in soil pit to 12"</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>No</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>No</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WB-up

Tree Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Sapling/Shrub Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals:	(A) (B)

Prevalence Index = B/A =

Herb Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Paspalum notatum</u>	<u>64</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. <u>Prochloa brasiliensis</u>	<u>1</u>		<u>NL</u>
3. <u>Pseudagrathalium sp.</u>	<u>4</u>		<u>FAC</u>
4. <u>Liriodendron canadense</u>	<u>2</u>		<u>NL</u>
5. <u>Sesbania sp.</u>	<u>2</u>		<u>FACU-FACW</u>
6. <u>Oxalis stricta</u>	<u>3</u>		<u>UPL</u>
7. <u>Solanum sp.</u>	<u>1</u>		<u>FAC-FACU</u>
8. <u>Chenopodium sp.</u>	<u>3</u>		<u>FACU-FACW</u>
9. <u>Eupatorium capitatum</u>	<u>3</u>		<u>FACU</u>
10. <u>Digitaria sp. ciliaris</u>	<u>3</u>		<u>FACU</u>
11. <u>Dichondra sp.</u>	<u>2</u>		<u>FAC</u>
12. <u>Cardamine pennsylvanica</u>	<u>3</u>		<u>FACU</u>
	<u>91</u>		= Total Cover

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Woody Vine Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

50% of total cover: _____ 20% of total cover: _____

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No

Remarks: (If observed, list morphological adaptations below).

Indicator Status
NL = not listed

Prevalence index not required because no hydric soil or hydrology for this stratum

SOIL

Sampling Point: WB-4P

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12"	10YR 2/1	M	10YR 3/2	M	-	-	VFS	not 70% masked particle

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 2/21/18
 Applicant/Owner: The Villages State: FL Sampling Point: W9-wet
 Investigator(s): Juan/CSTW Section, Township, Range: S 21, 17, 16 T19S R23E
 Landform (hillslope, terrace, etc.): knolls, rises, flats, ridges on MT Local relief (concave, convex, none): convex, linear Slope (%): 0-5%
 Subregion (LRR or MLRA): U Lat: 28°49'21.74" N Long: 82°1'12.07" W Datum: —
 Soil Map Unit Name: 33-Spaw fine sand, bouldery subsurface NWI classification: —
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center"><i>MT = marine terrace</i></p>	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<p><u>Secondary Indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<p>Field Observations:</p> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>Max depth in wetland ~ 0.4'</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0.6' in soil pit</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>to wetland edge</u> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: W9-net

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)																
2. _____				Total Number of Dominant Species Across All Strata: <u>3</u> (B)																
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)																
4. _____				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
_____ = Total Cover																				
50% of total cover: _____ 20% of total cover: _____																				
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)																				
1. _____				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0' <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
_____ = Total Cover																				
50% of total cover: _____ 20% of total cover: _____																				
Herb Stratum (Plot size: <u>30' radius</u>)																				
1. <u>Juncus edguae</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.																
2. <u>Cannellina diffusa</u>	<u>19</u>	<input checked="" type="checkbox"/>	<u>FACW</u>																	
3. <u>E. capitolium</u>	<u>3</u>		<u>FACU</u>																	
4. <u>Axonopus fistulosus</u>	<u>4</u>		<u>FACW</u>																	
5. <u>Polygonum hydropiperoides</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>OBL</u>																	
6. <u>L. narda canadense</u>	<u>2</u>		<u>NL</u>																	
7. <u>Alternanthera philoxeroides</u>	<u>2</u>		<u>OBL</u>																	
8. <u>Oxalis stricta</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>UPL</u>																	
9. <u>Axonopus furcatus</u>	<u>4</u>		<u>OBL</u>																	
10. <u>H. umbellata</u>	<u>3</u>		<u>OBL</u>																	
11. <u>Solanum sp.</u>	<u>1</u>		<u>FAC-FACU</u>																	
12. <u>Cadamine pennsylvanica</u>	<u>2</u>		<u>FACU</u>																	
_____ = Total Cover																				
50% of total cover: <u>44.5</u> 20% of total cover: <u>17.8</u>																				
Woody Vine Stratum (Plot size: <u>30' radius</u>)																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
_____ = Total Cover																				
50% of total cover: _____ 20% of total cover: _____																				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																				
Remarks: (If observed, list morphological adaptations below).																				

SOIL

Sampling Point: W9-Wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-0.7	10YR 2/2	M	10YR 3/2	C	-	-	SCL	
0.7-1.0	10YR 3/2	M	10YR 4/2	F	-	-	VFS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 2/21/18
 Applicant/Owner: The Villages State: FL Sampling Point: w10-wet
 Investigator(s): Jaw/CJH Section, Township, Range: S 21, 17, 16 T 19S R 23E
 Landform (hillslope, terrace, etc.): Flats, Flatwoods, ridge, knolls on MT Local relief (concave, convex, none): Convex, linear Slope (%): 0-2%
 Subregion (LRR or MLRA): 4 Lat: 28°49'9.47"N Long: 82°0'54.43"W Datum: -
 Soil Map Unit Name: 26-Wabasso FS, boundary subsurface NWI classification: -
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>MT = miami terraces</u>	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <u>FL cricket frogs</u>		Secondary Indicators (minimum of two required)
<input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input checked="" type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>H₂O at surface in soil pit</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> </u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> </u>		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

SOIL

Sampling Point: W10-wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-0.8'	10YR 2/1	M	10YR 3/1	C	-	-	VFS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 3/1/18
 Applicant/Owner: The Villages State: FL Sampling Point: SW2-Wet
 Investigator(s): CJH/JMW Section, Township, Range: S 21 17 6 T19S R23E
 Landform (hillslope, terrace, etc.): Flatwoods on marine terraces Local relief (concave, convex, none): Convex, linear Slope (%): 0-2%
 Subregion (LRR or MLRA): 1A Lat: 28°49'43.92"W Long: 82°1'6.45"W Datum: —
 Soil Map Unit Name: 44-Oldsma Fine Sand, bouldery subsurface NWI classification: —
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes — No — (If no, explain in Remarks.)
 Are Vegetation —, Soil — or Hydrology — significantly disturbed? Are "Normal Circumstances" present? Yes — No ✓
 Are Vegetation —, Soil —, or Hydrology — naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>Erosion / sediment layer in ditch</u>	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <u>water mark / vest line</u> <input type="checkbox"/> Iron Deposits (B5) <input checked="" type="checkbox"/> Other (Explain in Remarks) <u>off-l scarp edge + cut</u> <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <u>small flow</u> <input type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1.2' of flow east in ditch</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0.2' down in pit</u> Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe) Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: SW2-wet

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ulmus americanus</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

50% of total cover: 2.5 20% of total cover: 1

Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sabal palmetto</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

50% of total cover: 2.5 20% of total cover: 1

Herb Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Saururus cernuus</u>	<u>2</u>	_____	<u>OBL</u>
2. <u>Cardamine pensylvanica</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
3. <u>Cebelia asarifera</u>	<u>2</u>	_____	<u>FACW</u>
4. <u>Nephrrolepis sp.</u>	<u>2</u>	_____	_____
5. <u>Sanicula floridana</u>	<u>3</u>	_____	<u>FAC</u>
6. <u>Ludwigia sp.</u>	<u>2</u>	_____	_____
7. <u>Luzula affinis</u>	<u>3</u>	_____	<u>OBL</u>
8. <u>Commelina diffusa</u>	<u>1</u>	_____	<u>FACW</u>
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

50% of total cover: 15 20% of total cover: 6

Woody Vine Stratum (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Morica chinensis O. cordata</u>	<u>2</u>	_____	<u>FAC</u>
2. <u>Toxicodendron radicans</u>	<u>1</u>	_____	<u>FAC</u>
3. <u>P. guineensis</u>	<u>2</u>	_____	<u>FACU</u>
4. <u>Ampelopsis arborea</u>	<u>3</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
5. <u>Sarilaf bone-wort</u>	<u>4</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
_____	_____	_____	_____
_____	_____	_____	_____

50% of total cover: 6 20% of total cover: 2.4

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: SW2-wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1"	10YR 2/1	M	—	—	—			
1-12"	10YR 5/2	M	10YR 6/2	M		M	VFS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

Sediment layer on top but still hydric

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Noah Tract City/County: Sumter Sampling Date: 2/21/18
 Applicant/Owner: The Villages State: _____ Sampling Point: SW4-wet
 Investigator(s): CJH JMW Section, Township, Range: S21 17 16 T19S R23E
 Landform (hillslope, terrace, etc.): knolls, rises, flats, ridges on MT Local relief (concave, convex, none): convex, linear Slope (%): 0-5%
 Subregion (LRR or MLRA): U Lat: 28°49'24.99" N Long: 82°01'22.34" W Datum: _____
 Soil Map Unit Name: S3-Sparr fine sand, boundary subsurface NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: <i>MT = marine terrace</i>	

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <table style="width:100%;"> <tr> <td><input checked="" type="checkbox"/> Surface Water (A1)</td> <td><input checked="" type="checkbox"/> Aquatic Fauna (B13)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Marl Deposits (B15) (LRR U)</td> </tr> <tr> <td><input type="checkbox"/> Saturation (A3)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><input type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td><input checked="" type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td><i>scraped edge of pond</i></td> </tr> <tr> <td><input type="checkbox"/> Water-Stained Leaves (B9)</td> <td></td> </tr> </table>	<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<i>scraped edge of pond</i>	<input type="checkbox"/> Water-Stained Leaves (B9)		<p><u>Secondary Indicators (minimum of two required)</u></p> <table style="width:100%;"> <tr><td><input type="checkbox"/> Surface Soil Cracks (B6)</td></tr> <tr><td><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td></tr> <tr><td><input type="checkbox"/> Drainage Patterns (B10)</td></tr> <tr><td><input type="checkbox"/> Moss Trim Lines (B16)</td></tr> <tr><td><input type="checkbox"/> Dry-Season Water Table (C2)</td></tr> <tr><td><input type="checkbox"/> Crayfish Burrows (C8)</td></tr> <tr><td><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td></tr> <tr><td><input type="checkbox"/> Geomorphic Position (D2)</td></tr> <tr><td><input type="checkbox"/> Shallow Aquitard (D3)</td></tr> <tr><td><input type="checkbox"/> FAC-Neutral Test (D5)</td></tr> <tr><td><input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)</td></tr> </table>	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Moss Trim Lines (B16)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Aquatic Fauna (B13)																															
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<input type="checkbox"/> FAC-Neutral Test (D5)																																
<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)																																
<p>Field Observations:</p> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>3-4 ft in center</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0.5 in pit</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>to surface in pit</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____																															
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																																
Remarks:																																

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: SW4-wet

Tree Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)

_____ = Total Cover

50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

_____ = Total Cover

50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Eclipta prostrata</i>	8	✓	FACW
2. <i>Conoclinium diffusum</i>	3		FACW
3. <i>Cardamine pensylvanica</i>	25	✓	FACW
4. <i>E. capitatum</i>	6	✓	FACU
5. <i>Mizanthus</i> sp.	2		OBL
6. <i>Lyneia canadensis</i>	1		NL
7. <i>Pseudogyneria</i> sp.	2		FAC
8. <i>Sesbania</i> sp.	1		FACU - FACU
9. <i>Junus</i> sp. <i>erectus</i>	3		OBL
10. <i>Digitalis</i> sp. <i>ciliata</i>	3	✓	FACU
11. <i>Panicum repens</i>	25	✓	FACW
12.			

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

_____ = Total Cover

50% of total cover: 20.5 20% of total cover: 8.2

Woody Vine Stratum (Plot size: 30' radius)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below).

NL - not on plant list

SOIL

Sampling Point: SW4-wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-0.35'	10YR 3/1	M	10YR 5/1	F				
			10YR 4/6	C	C	PL		
0.35'-0.9'	10YR 3/3	M						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Suwannee Sampling Date: 3/22/18
 Applicant/Owner: TYLC State: FL Sampling Point: WA-wet
 Investigator(s): JLR Section, Township, Range: S16, 17, 20, 21 / T19 / R23
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): NONE Slope (%): _____
 Subregion (LRR or MLRA): U Lat: 28° 49' 32.91" N Long: 82° 1' 5.21" W Datum: _____
 Soil Map Unit Name: Oldman Fine Sand, boundary subsurface NWI classification: MA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
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Remarks:
Suwannee Co. received ~65-inches of rainfall in 2017, normal or average is 52-inches. Site is very wet relative to normal or average conditions

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required, check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0.8 ft.</u> Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WA-wet

Tree Stratum (Plot size: <u>Whole system</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Lig. Stypac.</u>	<u>3</u>		<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) <u>80</u> Total Number of Dominant Species Across All Strata: <u>3</u> (B) <u>130</u> Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66%</u> (A/B) <u>61%</u> Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>23</u> x 1 = <u>23</u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>113</u> x 3 = <u>339</u> FACU species <u>55</u> x 4 = <u>220</u> UPL species <u>-</u> x 5 = <u>-</u> Column Totals: <u>201</u> (A) <u>602</u> (B) Prevalence Index = B/A = <u>2.995</u> Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
2. <u>Acer rubrum</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FAC</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
_____ = Total Cover					
50% of total cover: _____ 20% of total cover: _____					
Sapling/Shrub Stratum (Plot size: _____)					
1. <u>S. xyloperum</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>		
2. <u>S. pauciflorum</u>	<u>10</u>		<u>FAC</u>		
3. <u>M. caryocarpum</u>	<u>10</u>		<u>FAC</u>		
4. <u>S. repens</u>	<u>5</u>		<u>FACU</u>		
5. _____					
6. _____					
7. _____					
8. _____					
_____ = Total Cover					
50% of total cover: _____ 20% of total cover: _____					
Herb Stratum (Plot size: _____)					
1. <u>P. rubrum</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	
2. <u>C. striatum</u>	<u>10</u>		<u>FACW</u>		
3. <u>A. rubrum</u>	<u>3</u>		<u>FAC</u>		
4. <u>W. vine</u>	<u>5</u>		<u>OBL</u>		
5. <u>J. sparganium</u>	<u>5</u>		<u>OBL</u>		
6. <u>H. umbellata</u>	<u>3</u>		<u>OBL</u>		
7. <u>Furcraea</u>	<u>10</u>		<u>OBL</u>		
8. _____					
9. _____					
10. _____					
11. _____					
12. _____					
_____ = Total Cover					
50% of total cover: _____ 20% of total cover: _____					
Woody Vine Stratum (Plot size: _____)					
1. <u>V. rotundifolia</u>	<u>7</u>		<u>FAC</u>		
2. _____					
3. _____					
4. _____					
5. _____					
_____ = Total Cover					
50% of total cover: _____ 20% of total cover: _____					
Remarks: (If observed, list morphological adaptations below).					

SOIL

Sampling Point: WA-wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-0.55	10YR 3/1						FS	ND + 70% cemented
0.55-1+	10YR 3/1						FS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 4/21/18
 Applicant/Owner: TYLC State: FL Sampling Point: UPI
 Investigator(s): JLR/VKS Section, Township, Range: S16/17/20/21, T19S, R23E
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR U Lat: 28° 49' 32.91" Long: 82° 1' 5.21" Datum: _____
 Soil Map Unit Name: Wabesafine sand, boulder, submoist NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>Sumter County received ~70" of rain where normal is 52" for 2017</u>	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required, check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.	
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: UPI

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

_____ = Total Cover
 50% of total cover: _____ 20% of total cover: _____

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sambucus Can.</u>	<u>1</u>		<u>FACW</u>
2.			
3.			
4.			
5.			
6.			
7.			
8.			

_____ = Total Cover
 50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Achillea</u>	<u>2</u>		<u>FACU</u>
2. <u>Cyperus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
3. <u>Juncus</u>	<u>2</u>		<u>OBL</u>
4. <u>Scirpus</u>	<u>3</u>		<u>FAC</u>
5. <u>Cyperus retrofractus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
6. <u>Sarcocornis carn.</u>	<u>5</u>		<u>OBL</u>
7. <u>Ludwigia sp.</u>	<u>1</u>		<u>OBL</u>
8. <u>Cyperus</u>	<u>5</u>		<u>OBL</u>
9. <u>Utricularia</u>	<u>1</u>		<u>FAC</u>
10. <u>Sida sp. (rhomb.)</u>	<u>5</u>		<u>FACU</u>
11. <u>Rubus</u>	<u>1</u>		<u>FAC</u>
12. <u>Sarcocornis</u>	<u>2</u>		<u>FACU</u>

FAC Juncus 2 Erechtites 1 total cover
 50% of total cover: _____ 20% of total cover: _____

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sida</u>	<u>10</u>		<u>FAC</u>
2. <u>Ampelococcus amnic</u>	<u>3</u>		<u>FAC</u>
3.			
4.			
5.			

_____ = Total Cover
 50% of total cover: _____ 20% of total cover: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of: 13 Multiply by: _____

OBL species 13 x 1 = 13

FACW species 6 x 2 = 12

FAC species 22 x 3 = 66

FACU species 47 x 4 = 188

UPL species 0 x 5 = 0

Column Totals: 88 (A) 279 (B)

Prevalence Index = B/A = 3.17

Hydrophytic Vegetation Indicators:

NO 1 - Rapid Test for Hydrophytic Vegetation

NO 2 - Dominance Test is >50%

NO 3 - Prevalence Index is ≤3.0¹

NO Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: VP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-0.3	10YR 2/1						FS	NOT dark surface
	10YR 2/1	20					FS	
0.3-0.65	10YR 2/1						FS	
	10YR 3/2	20					FS	
0.65-1.2	10YR 9/2						FS	
	10YR 2/1	2					FS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) | <input type="checkbox"/> 1 cm Muck (A9) (LRR O) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) | <input type="checkbox"/> 2 cm Muck (A10) (LRR S) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) | |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) | |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) | |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 3/22/18
 Applicant/Owner: TVLC State: FL Sampling Point: WB-wet
 Investigator(s): JLR Section, Township, Range: 816, 17, 20, 21 / T19 / R 23
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): U Lat: 29° 49' 32.91" N Long: 82° 1' 5.21" W Datum: _____
 Soil Map Unit Name: Oldsman fine sand, boundary surface fine NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	

Remarks:
Sumter Co. received ~68 inches of rain in 2017, normal or average is 52 inches. Site is very wet relative to normal / average conditions.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required, check all that apply)		_____ Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> Surface Water (A1)	_____ Aquatic Fauna (B13)	_____ Sparsely Vegetated Concave Surface (B8)	
_____ High Water Table (A2)	_____ Marl Deposits (B15) (LRR U)	_____ Drainage Patterns (B10)	
_____ Saturation (A3)	_____ Hydrogen Sulfide Odor (C1)	_____ Moss Trim Lines (B16)	
_____ Water Marks (B1)	_____ Oxidized Rhizospheres along Living Roots (C3)	_____ Dry-Season Water Table (C2)	
_____ Sediment Deposits (B2)	_____ Presence of Reduced Iron (C4)	_____ Crayfish Burrows (C8)	
_____ Drift Deposits (B3)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Saturation Visible on Aerial Imagery (C9)	
_____ Algal Mat or Crust (B4)	_____ Thin Muck Surface (C7)	_____ Geomorphic Position (D2)	
_____ Iron Deposits (B5)	_____ Other (Explain in Remarks)	_____ Shallow Aquitard (D3)	
_____ Inundation Visible on Aerial Imagery (B7)		_____ FAC-Neutral Test (D5)	
_____ Water-Stained Leaves (B9)		_____ Sphagnum moss (D8) (LRR T, U)	
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Surface Water Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>4 in</u>		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____		
(includes capillary fringe)			

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: UB-wet

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. <u>N/A</u>				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Herb Stratum (Plot size: <u>whole system</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>S. ceruus</u>	<u>75</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2. <u>Typha</u>	<u>4</u>		<u>OBL</u>	
3. <u>Canna flaccida</u>	<u>3</u>		<u>OBL</u>	
4. <u>Sag. lanc.</u>	<u>2</u>		<u>OBL</u>	
5. <u>Chelidonia rep.</u>	<u>10</u>		<u>OBL</u>	
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by: _____

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes No

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: WB wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-1.3	10YR 2/1						VFS	dark surface

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input checked="" type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: NORTH TRACT City/County: Sumter Sampling Date: 4/2/18
 Applicant/Owner: TVCC State: FL Sampling Point: UP2
 Investigator(s): JUR/VKS Section, Township, Range: S16/T17/R20/24, T19S, R23E
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR U Lat: 28° 49' 32.91" Long: 82° 01' 52.1" Datum: _____
 Soil Map Unit Name: Wabasso fine sand, boundary uncertain, free NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
--	---

Remarks:
Sumter County received approximately 70" of rain in 2017 where normal is 52"

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required, check all that apply)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<input type="checkbox"/> Marl Deposits (B15) (LRR U)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: VP2

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>N/A</u>			
2. <u>N/A</u>			
3.			
4.			
5.			
6.			
7.			
8.			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

_____ = Total Cover
50% of total cover: _____ 20% of total cover: _____

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>53</u>	x 1 = <u>53</u>
FACW species <u>2</u>	x 2 = <u>4</u>
FAC species <u>37</u>	x 3 = <u>111</u>
FACU species <u>20</u>	x 4 = <u>80</u>
UPL species <u>15</u>	x 5 = <u>75</u>
Column Totals: <u>127</u> (A)	<u>323</u> (B)

Prevalence Index = B/A = 2.54

Sapling/Shrub Stratum (Plot size: _____)

1. <u>N/A</u>			
2. <u>N/A</u>			
3.			
4.			
5.			
6.			
7.			
8.			

Hydrophytic Vegetation Indicators:

N/D 1 - Rapid Test for Hydrophytic Vegetation

N/D 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0¹

N/D Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

_____ = Total Cover
50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: _____)

1. <u>Saw palmetto</u>	<u>5</u>		<u>FACW</u>
2. <u>cabbage palmetto</u>	<u>5</u>		<u>FAC</u>
3. <u>Carex sp. (stressed)</u>	<u>3.0</u>	<u>✓</u>	<u>OBL</u>
4. <u>Juncus marif.</u>	<u>5</u>		<u>OBL</u>
5. <u>Sagrus serotina</u>	<u>8</u>		<u>OBL</u>
6. <u>Oxalis corniculata</u>	<u>15</u>	<u>✓</u>	<u>UPL</u>
7. <u>esp. bay.</u>	<u>15</u>	<u>✓</u>	<u>FACW</u>
8. <u>Cyperus haysan</u>	<u>3</u>		<u>OBL</u>
9. <u>Widow's tye</u>	<u>3</u>		<u>OBL</u>
10. <u>elephant</u>	<u>4</u>		<u>OBL</u>
11. <u>Lythrum alba</u>	<u>2</u>		<u>FACW</u>
12. <u>ly. stylis</u>	<u>2</u>		<u>FAC</u>

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Woody Vine Stratum (Plot size: _____)

1. <u>Smilax sp.</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>
2. <u>ampelopsis</u>	<u>5</u>		<u>FAC</u>
3.			
4.			
5.			

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks: (If observed, list morphological adaptations below).
evidence of logging

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 4/2/18
 Applicant/Owner: TVLC State: FL Sampling Point: WC
 Investigator(s): JLR/VKS Section, Township, Range: S16/T20/R21, T19S, R23E
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR U Lat: 28° 49' 32.91" Long: 82° 1' 52.1" Datum: _____
 Soil Map Unit Name: Wahua fine sand, bouldery, subcl. fine NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
--	--

Remarks:
Sumter County received approximately 70" of rain in 2017 where normal is approximately 52"

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required, check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) _____ Aquatic Fauna (B13) _____ High Water Table (A2) _____ Marl Deposits (B15) (LRR U) _____ Saturation (A3) _____ Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Water Marks (B1) _____ Oxidized Rhizospheres along Living Roots (C3) _____ Sediment Deposits (B2) _____ Presence of Reduced Iron (C4) _____ Drift Deposits (B3) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Algal Mat or Crust (B4) _____ Thin Muck Surface (C7) _____ Iron Deposits (B5) _____ Other (Explain in Remarks) _____ Inundation Visible on Aerial Imagery (B7) _____ Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) <input checked="" type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ FAC-Neutral Test (D5) _____ Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2"</u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WC

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Carya sp. (Pignut)</u>	<u>5</u>		<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)
50% of total cover: _____ 20% of total cover: _____				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Ulmus am.</u>	<u>1</u>		<u>FAC</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: _____ 20% of total cover: _____				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Luziola fluit.</u>	<u>35</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. <u>Cyperus sp. haspan</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
3. <u>Polygonum</u>	<u>5</u>		<u>OBL</u>	
4. <u>Juncus eff.</u>	<u>4</u>		<u>OBL</u>	
5. <u>Sag. gram.</u>	<u>3</u>		<u>OBL</u>	
6. <u>Conium. diff.</u>	<u>2</u>		<u>FACW</u>	
7. <u>Phytol. nod.</u>	<u>4</u>		<u>FAC</u>	
8. <u>Cimicif. dact.</u>	<u>1</u>		<u>FACU</u>	
9. <u>Urt. arcuata</u>	<u>5</u>		<u>OBL</u>	
10. <u>Saururus cern.</u>	<u>1</u>		<u>OBL</u>	
11. <u>Carex sp.</u>	<u>2</u>		<u>OBL</u>	
12. _____				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
50% of total cover: _____ 20% of total cover: _____				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Amphilepsis</u>	<u>1</u>		<u>FAC</u>	
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

SOIL

Sampling Point: WC

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-0.1	10YR 2/1						Muck	
0.1-0.65	10YR 2/1						LFS	
	10YR 5/2	720					FS	
0.65-1.0	10YR 2/1		10YR 4/6	2-20		M		Loamy clay

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) | <input type="checkbox"/> 1 cm Muck (A9) (LRR O) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) | <input type="checkbox"/> 2 cm Muck (A10) (LRR S) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A, B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> (MLRA 153B) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input checked="" type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) | ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) | |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) | |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | | |

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: North Tract City/County: Sumter Sampling Date: 4/2/18
 Applicant/Owner: NCC State: FL Sampling Point: VP 3
 Investigator(s): JUR/VKS Section, Township, Range: S14/T17/R20/21, TMS, R23E
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%) _____
 Subregion (LRR or MLRA): LRR U Lat: 28° 49' 37.91" Long: 82° 1' 51.21" Datum: _____
 Soil Map Unit Name: Unbescofine sand, golden subsoil NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
--	--

Remarks:
Sumter County received approximately 70" of rain in 2017 where 52" is normal

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required, check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: CP3

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Morus sp. (alba?)</u>	<u>10</u>		<u>FACU</u>
2. <u>Quercus nig.</u>	<u>5</u>		<u>FACU</u>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3 (A/B)

_____ = Total Cover
 50% of total cover: _____ 20% of total cover: _____

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>3</u>	x 1 = <u>3</u>
FACW species <u>15</u>	x 2 = <u>30</u>
FAC species <u>73</u>	x 3 = <u>219</u>
FACU species <u>45</u>	x 4 = <u>180</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>136</u> (A)	<u>432</u> (B)

Prevalence Index = B/A = 3.18

Sapling/Shrub Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ulmus am.</u>	<u>2</u>		<u>FAC</u>
2. <u>Calliandra am</u>	<u>5</u>		<u>FACU</u>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			

Hydrophytic Vegetation Indicators:

NO 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

NO 3 - Prevalence Index is ≤3.0¹

NO Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

_____ = Total Cover
 50% of total cover: _____ 20% of total cover: _____

Herb Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Cirsium hord.</u>	<u>3</u>		<u>FAC</u>
2. <u>Hypoxis vert.</u>	<u>3</u>		<u>INDIGENOUS</u>
3. <u>Polyg. prostratum</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>
4. <u>Pasp. setaceum</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>
5. <u>Eriogonum vernum</u>	<u>3</u>		<u>OBL</u>
6. <u>Cary. alb.</u>	<u>8</u>		<u>FAC</u>
7. <u>Sabal palm.</u>	<u>5</u>		<u>FAC</u>
8. <u>Axonopus fiss.</u>	<u>10</u>	<u>✓</u>	<u>FACW</u>
9. <u>Lig. styr.</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>
10. <u>Setaria sp.</u>	<u>2</u>		<u>FAC</u>
11. <u>Scop. dul.</u>	<u>3</u>		<u>FAC</u>
12. <u>Adiantum sp.</u>	<u>5</u>		<u>FACW</u>

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

_____ = Total Cover
 50% of total cover: _____ 20% of total cover: _____

Woody Vine Stratum (Plot size: _____)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Amphelpas</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>
2. <u>Smilax sp.</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>
3. _____			
4. _____			
5. _____			

Hydrophytic Vegetation Present? Yes _____ No ✓

_____ = Total Cover
 50% of total cover: _____ 20% of total cover: _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: VP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-0.3	10YR 2/2						FS	not 70% coated
0.3-0.6	10YR 2/2						FS	
↓	10YR 5/2	2-20					FS	
0.6-1.0 ⁺	10YR 4/2						FS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

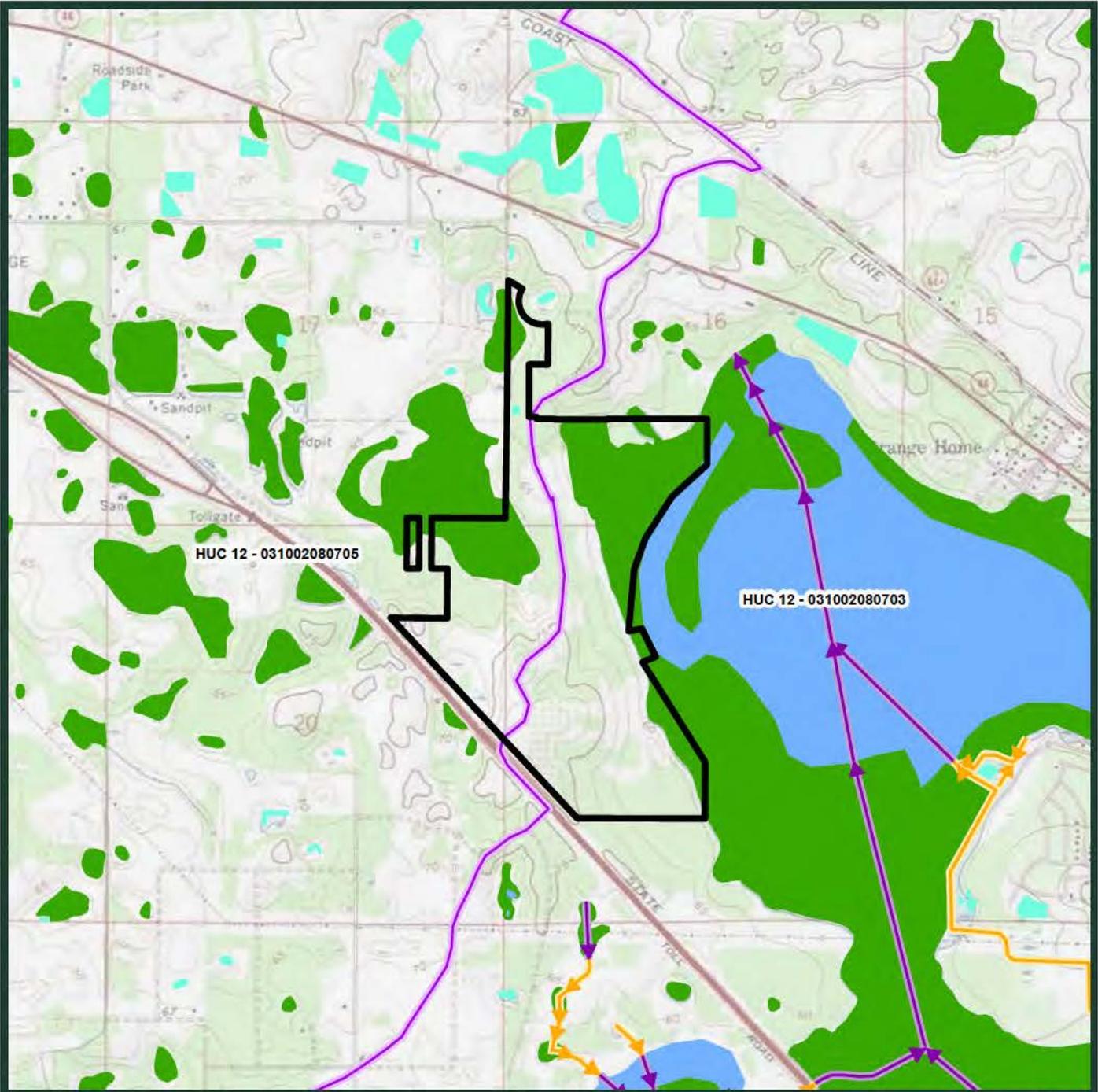
- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) | <input type="checkbox"/> 1 cm Muck (A9) (LRR O) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) | <input type="checkbox"/> 2 cm Muck (A10) (LRR S) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Muck Presence (A8) (LRR U) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) | <input type="checkbox"/> Marl (F10) (LRR U) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) | ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) | |
| <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) | |
| <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | | |

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:



Legend

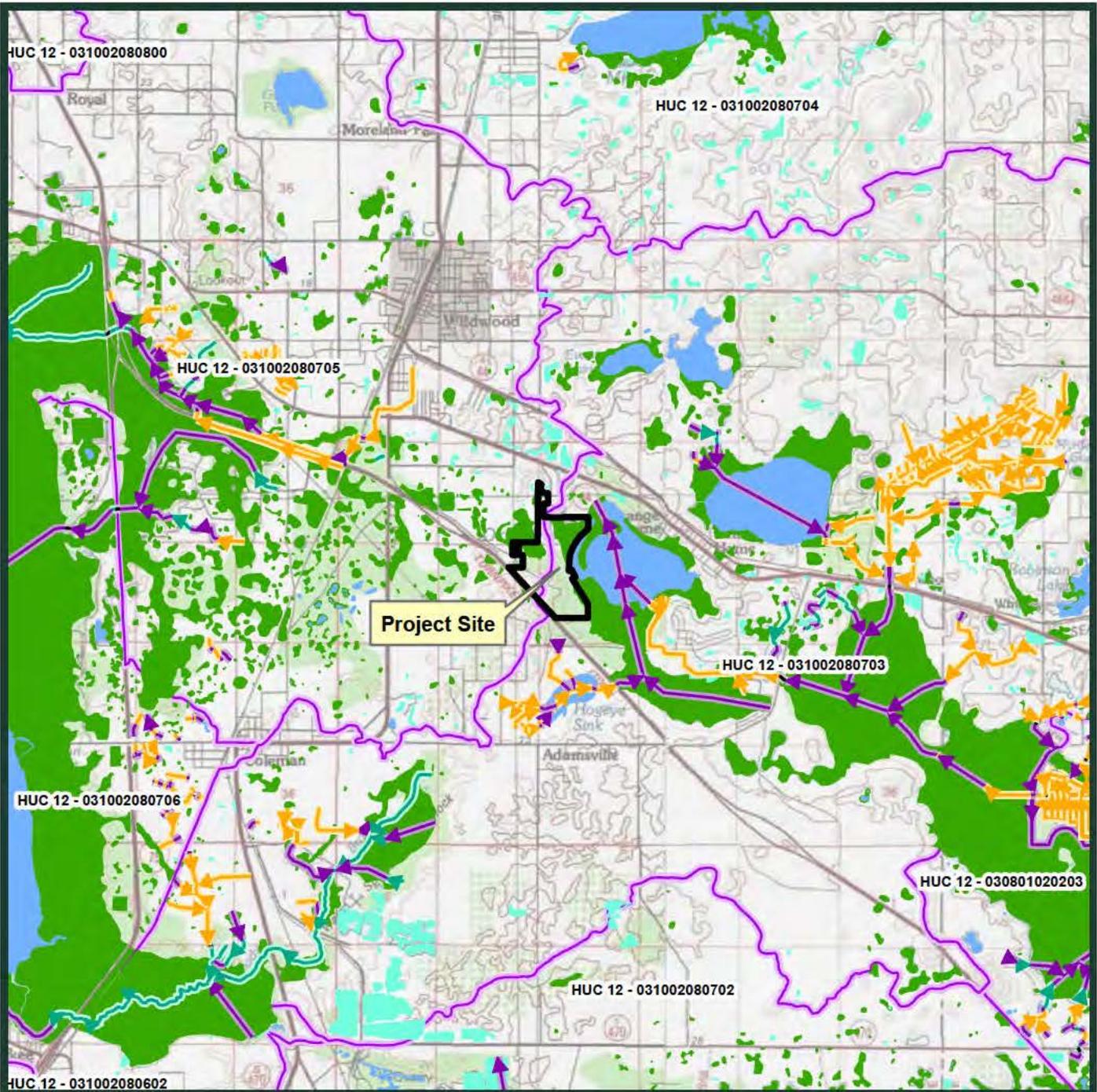
- Project Boundary (328.74 ac)
- HUC 12 Watershed Boundary
- Lake/Pond
- Reservoir
- Swamp/Marsh
- NHD Flowlines
- Canal Ditch
- Artificial Path

Source: Property boundary provided by Farmer Barley, 20170614. Topo and NHD data streamed from ESRI.



EXHIBIT 2A
NATIONAL HYDROGRAPHY DATASET (NHD) MAP OF THE NORTH TRACT,
SUMTER COUNTY, FLORIDA.

BDA BREEDLOVE, DENNIS & ASSOCIATES, INC.
 Environmental Consultants
 330 W. Canton Ave., Winter Park, FL 32789 • 407-677-1882



Legend

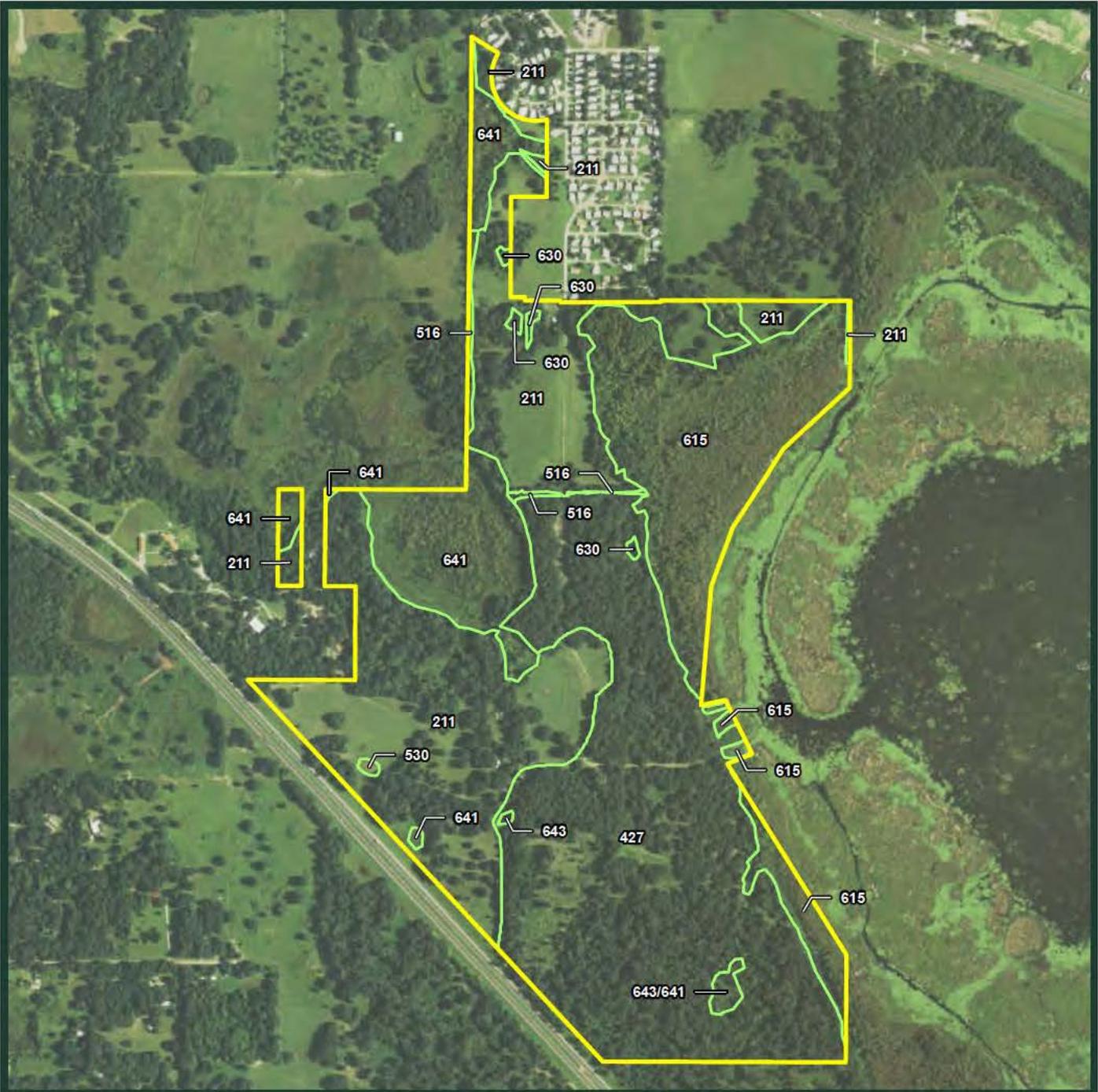
- Project Boundary (328.74 ac)
- HUC 12 Watershed Boundary
- NHD Waterbodies**
- Lake/Pond
- Reservoir
- Swamp/Marsh
- NHD Flowlines**
- Artificial Path
- Canal Ditch
- Connector
- Stream/River

Source: Property boundary provided by Famer Barley, 20170614. Topo and NHD data streamed from ESRI.



**EXHIBIT 2B
NATIONAL HYDROGRAPHY DATASET (NHD) MAP OF THE NORTH TRACT,
SUMTER COUNTY, FLORIDA.**

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Environmental Consultants
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Legend

Project Boundary (328.74 ac)

FLUCFCS Data

- 211 - Improved Pastures (109.23 ac)
- 427 - Live Oak (123.41 ac)
- 516 - Ditches (1.50 ac)
- 530 - Reservoirs (0.30 ac)

- 615 - Streams and Lake Swamps (Bottomland) (60.44 ac)
- 630 - Wetland Forested Mixed (0.94 ac)
- 641 - Freshwater Marshes (31.48 ac)
- 643 - Wet Prairies (0.15 ac)
- 643/641 - Wet Prairies/Freshwater Marshes (1.29 ac)

Source: Boundary provided by Farmer Barley on 20170814. Wetland delineation based on wetland flags provided by Bio-Tech Consulting, Inc.; 20170609, surveyed wetland lines provided by Farmer Barley; 20170823 and photointerpretation and selective groundtruthing by BDA. Aerial streamed from ESRI.

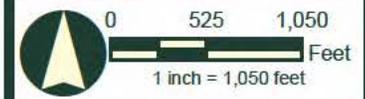
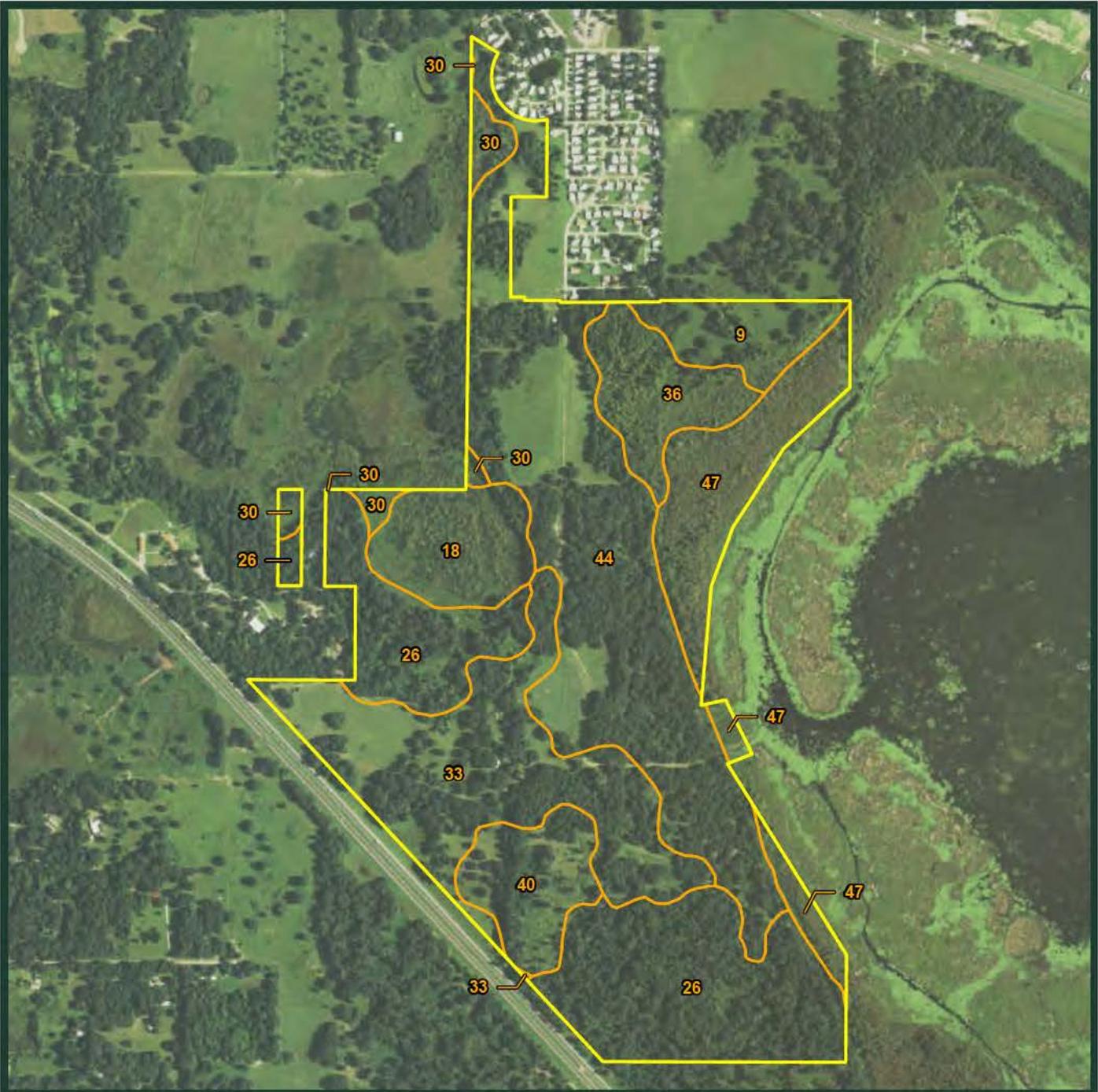


EXHIBIT 3
FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS)
MAP FOR THE NORTH TRACT, SUMTER COUNTY, FLORIDA.

BDA BREEDLOVE, DENNIS & ASSOCIATES, INC.
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Legend

Project Boundary (328.74 ac)

NRCS Soils

18 - Okeelanta muck (18.69 ac)

26 - Wabasso fine sand, bouldery subsurface (70.19 ac)

30 - Placid fine sand, depressional (6.3 ac)

33 - Sparr fine sand, bouldery subsurface, 0 to 5% slopes (58.8 ac)

36 - Floridana mucky fine sand, depressional (17.8 ac)

40 - Millhopper sand, bouldery subsurface, 0 to 5% slopes (17.34 ac)

44 - Oldsmar fine sand, bouldery subsurface (94.68 ac)

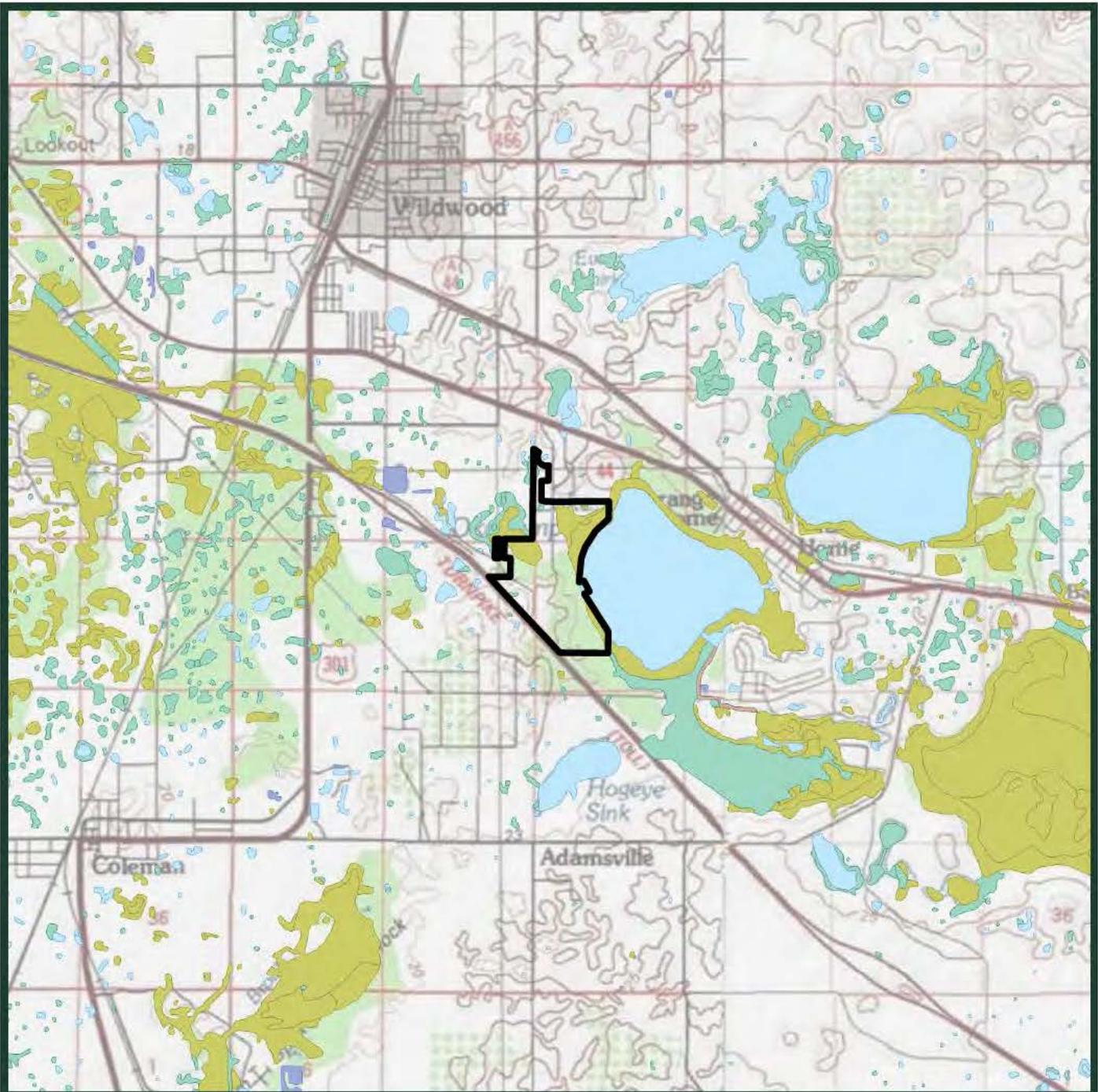
47 - Okeelanta muck, frequently flooded (31.79 ac)

9 - Paisley fine sand, bouldery subsurface (13.15 ac)



**EXHIBIT 4
NATURAL RESOURCES CONSERVATION SERVICE (NRCS) SOILS MAP OF THE
NORTH TRACT, SUMTER COUNTY, FLORIDA**

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Legend

 Project Boundary (328.74 ac)

Wetlands

 Estuarine and Marine Wetland

 Freshwater Emergent Wetland

 Freshwater Forested/Shrub Wetland

 Freshwater Pond

 Lake

 Other

 Riverine

Source: Property boundary provided by Farmer Barley, 20170614. NWI and Topo data streamed from ESRI.

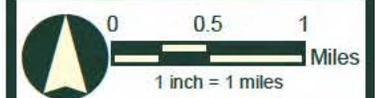
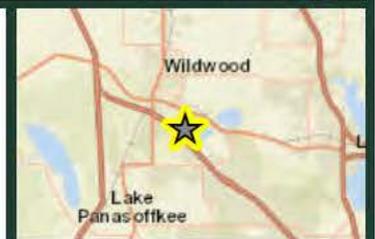
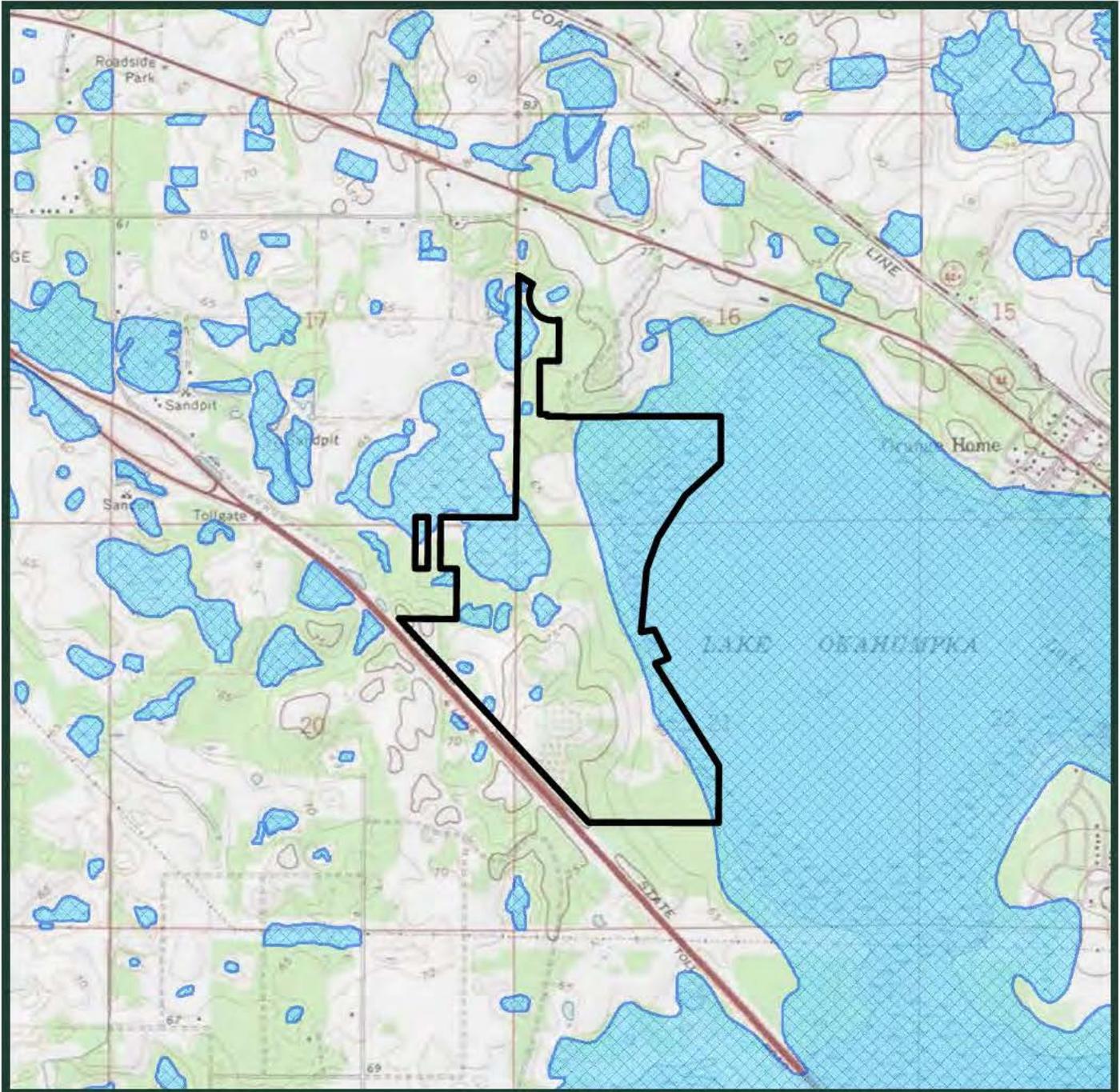


EXHIBIT 5
 NATIONAL WETLAND INVENTORY DATA FOR THE NORTH TRACT, SUMTER COUNTY, FLORIDA.

BDA BREEDLOVE, DENNIS & ASSOCIATES, INC.
 Environmental Consultants
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Legend

-  Project Boundary (328.74 ac)
-  100-Year Floodplain

Source: Boundary provided by Famer Barley, 20170614. Topo streamed from ESRI.

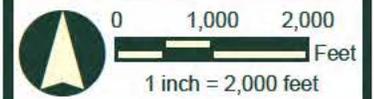
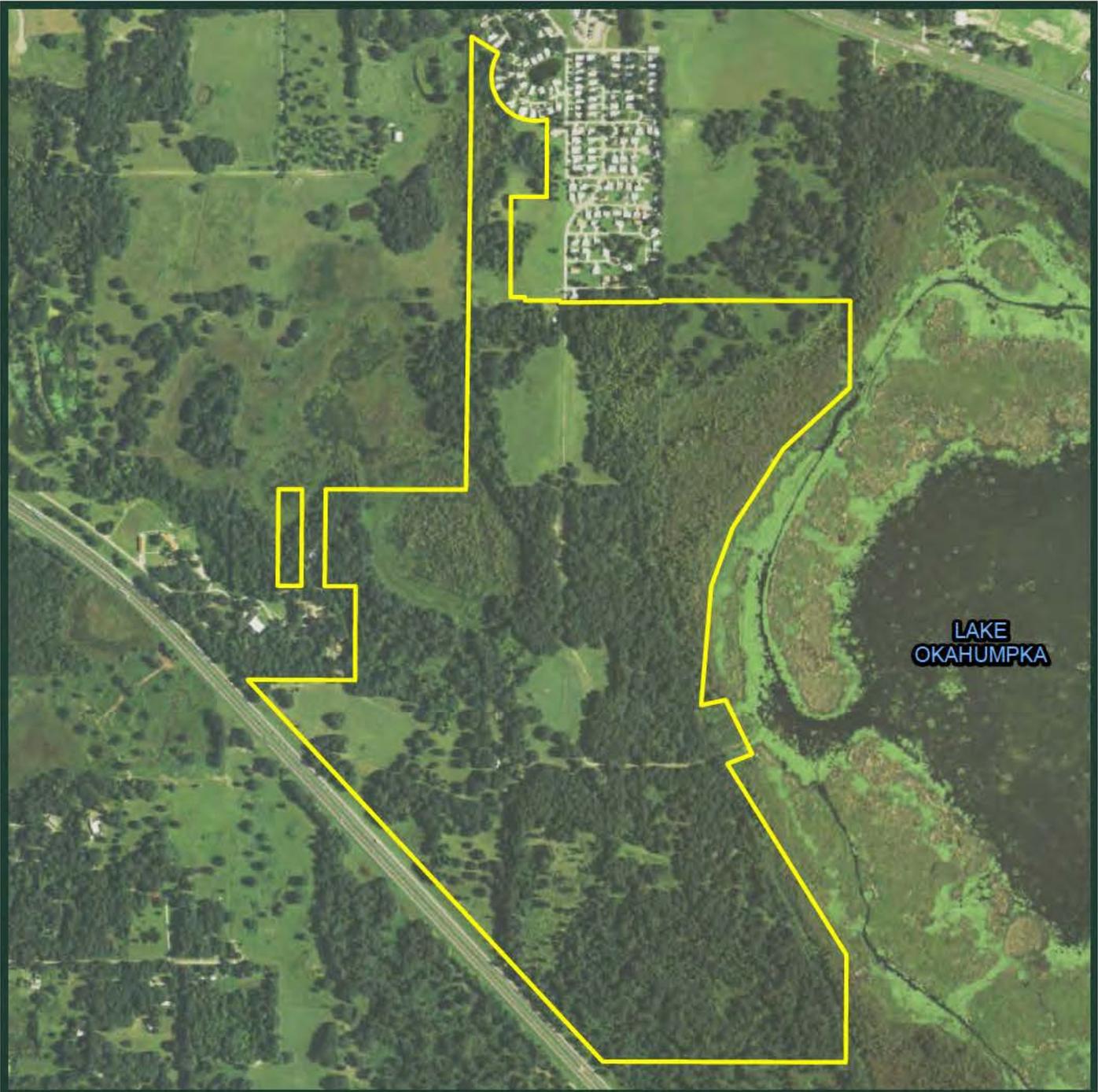


EXHIBIT 6
FEDERAL EMERGENCY MANAGEMENT AGENCY 100-YEAR FLOODPLAIN MAP
OF THE NORTH TRACT, SUMTER COUNTY, FLORIDA.

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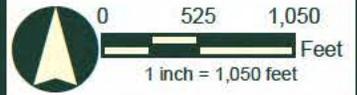


**LAKE
OKAHUMPKA**

Legend

 Project Boundary (328.74 ac)

Source: Property boundary provided by Farmer Barley, 20170614. Aerial streamed from ESRI.



**EXHIBIT 7
AERIAL PHOTOGRAPH OF THE NORTH TRACT, SUMTER COUNTY, FLORIDA.**

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DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS WETLANDS
ON THE NORTH TRACT, SUMTER COUNTY, FLORIDA.



- Legend**
- Project Boundary (276.69 ac)
 - Wetlands and Surface Waters**
 - Surface Waters
 - Wetlands



Source: Boundary provided by Farmer Barley on 20170614.
Surveyed wetland lines provided by Farmer Barley 20180410.
Aerial streamed from ESRI.



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